AUGUST 1, 1951

MODERN MEDICINE

The Journal of Diagnosis and Treatment

Dr. Roger W. Barnes
(see page 9)

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Here is

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B_{12} activity of at least 12 micrograms of vitamin B_{12} per oz. as determined by microbiological assay.

Hematinic quantities of iron (ferrous gluconate).

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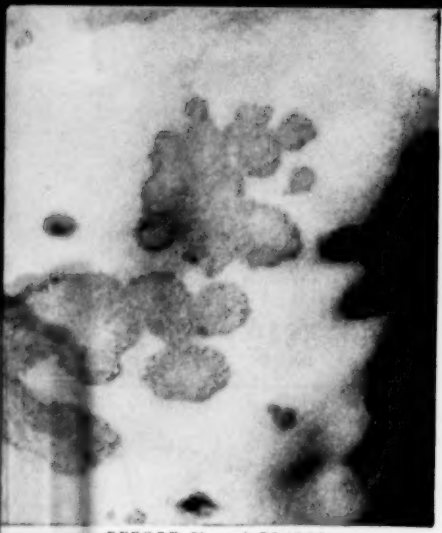

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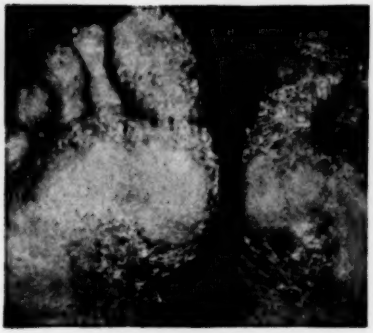
"More effective in ringworm of the scalp than any other topical agent."[1]



tinea pedis

In "athlete's foot" a combined cured and improved rate of 95% has been obtained.[1]

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1. Stritzler, C.; Fishman, I. M., and Laurens, S.: *Transactions New York Acad. Sc., 13*:81, Nov., 1950.

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for

August 1

1951

Modern Medicine

Vol. 19, No. 15

THE MAN ON THE COVER is Dr. Roger W. Barnes, Los Angeles, practicing urologist and teacher. Dr. Barnes is Professor of Surgery (Urology) and Chairman of the Section on Surgery, College of Medical Evangelists, School of Medicine; Chief of the Department of Urology, White Memorial Hospital; Senior Attending Surgeon (Urology), Los Angeles County Hospital; Head of the Department of Urology and Chairman of the Surgical Committee, Glendale Sanitarium and Hospital; Senior Consultant in Urology, Methodist Hospital. Dr. Barnes has been a frequent contributor of papers on urology to scientific journals and is author of the article in the *Journal of Urology* upon which the report, "Transurethral Prostatic Resection" on page 80, is based.

Contents for August 1 1951

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(Continued on page 12)

Effective against many bacterial and rickettsial infections, as well as certain protozoal and large viral diseases.

AUREOMYCIN

Hydrochloride Crystalline

The General Practitioner

is the clinician most likely to be called at the first sign of contagious disease. He cares for the majority of such cases and initiates the treatment of many obscure or refractory diseases. Increasingly, the family physician is turning to aureomycin as a preferred drug for the treatment of many infectious diseases. The broad range of effectiveness of aureomycin, coupled with a lack of any significant tendency to evoke bacterial resistance and a low incidence of undesirable side-reactions, render aureomycin indispensable to the busy practitioner.

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Contents for August 1 1951

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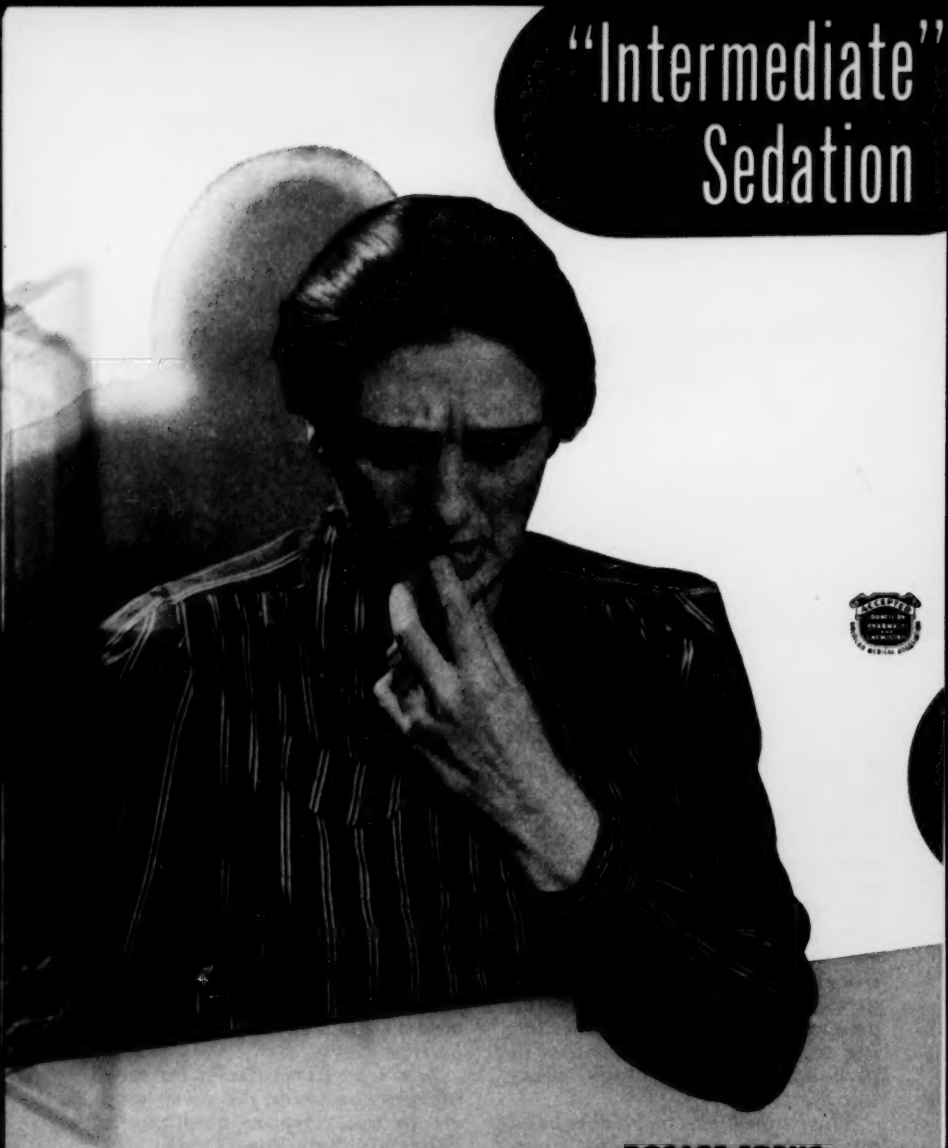

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Tablets, 0.1 Gm. (1½ gr.), pink

Capsules, 0.1 Gm. (1½ gr.), lavender

in Nervousness

In outlining the clinical management of the patient with fatigue and nervousness, Wilbur[1] states:

> "Symptomatic treatment of exhausted and nervous persons may be extremely helpful . . . It reassures the patient, gives him a more hopeful outlook, strengthens his confidence in the physician and consequently simplifies psychotherapy.
>
> "Sedatives are the most useful drugs in treatment . . ."

Small doses of sedatives, states this author, used during the day and to obtain sleep at night "can change the whole symptomatic complexion of a nervous patient." Except in severely psychoneurotic persons, he has not found that psychologic dependence on barbiturates becomes common.

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"INTERMEDIATE SEDATIVE"

Particularly useful in cases where mild, relatively prolonged sedation is desired is the "intermediate" sedation provided by Butisol Sodium. The rapidity and duration of Butisol Sodium's action is intermediate between the fast-acting derivative, pentobarbital, and the longer-acting barbital and phenobarbital.[2]

For daytime sedation—to allay nervous tension and anxiety—Butisol Sodium is especially helpful. With proper regulation of dosage there is no cumulative action and a minimum of lethargy and "hangover."

1. Wilbur, D. L.: Clinical Management of the Patient with Fatigue and Nervousness, J.A.M.A. 141:1100-1104 (Dec. 24) 1949.
2. New & Nonofficial Remedies, Council on Pharmacy and Chemistry, A.M.A., J. B. Lippincott, 1949, pp. 456-457.

McNEIL LABORATORIES, INC. PHILADELPHIA 32, PENNSYLVANIA

LETTER FROM THE EDITOR

Dear Reader:

A doctor from Cincinnati, headed for northern Minnesota and a rendezvous with a muskie he had almost landed last year, stopped in to chat.

He said he had read *Modern Medicine* for years and had meant to stop in, before, to see the headquarters of his favorite journal.

"I find something to interest me in every issue," he declared. "Haven't had time to read the last one. It came just before I started my vacation. Didn't want to chance losing it, so I stuffed it into my pocket and brought it along to read when the fish aren't biting."

We don't know what lure the doctor used to hook his muskie, but his kind of talk is the right bait if you want to catch an editor. Our greatest desire and constant endeavor is to publish the kind of journal none of you will want to miss. When our friend told us we were right on the target he had us in his pocket along with *Modern Medicine*.

Now we don't suggest that you give up your vacation to read *Modern Medicine*. That isn't necessary. Just make your spare moments count. Our medical editors and expert science writers work painstakingly to make each report fact-packed, readable, and easily comprehended. The articles are short and to the point. They are written to give the greatest amount of specific information possible in the fewest number of words. Take a tip from our Cincinnati friend, carry a copy in your pocket, and use time otherwise wasted, to keep informed of significant developments in diagnosis and treatment.

EDITOR

for the pain, depression, and cramps* of

dysmenorrhea

*"The most satisfactory antispasmodic drug for use in spastic dysmenorrhea is, in my experience, Benzedrine Sulfate . . ."[1]

Each dose (2 tablets) contains:

'Benzedrine' Sulfate	5 mg.
Acetylsalicylic acid	5 gr.
Phenacetin	5 gr.

Be sure to prescribe *2 tablets per dose*—to get the full benefit of the 'Benzedrine' component.

Edrisal 2 tablets per dose

For unusually severe dysmenorrhea, prescribe 'Edrisal with Codeine'

'Edrisal' and 'Benzedrine' T.M. Reg. U.S. Pat. Off.

1. Janney, J. C.: Medical Gynecology, ed. 2, Philadelphia, W. B. Saunders Company, 1950, p. 365.

Smith, Kline & French Laboratories, Philadelphia

Correspondence

Communications from the readers of MODERN MEDICINE *are always welcome. Address communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

Simple Cord Clamp

TO THE EDITORS: The clamp described by Dr. Edward N. Cook of the Mayo Clinic for closure of a catheter intake tube (*Modern Medicine*, Apr. 15, 1951, p. 88) is very similar to one I have used for several years to clamp off cords of newborn babies. In more than 200 consecutive cases, there has been no subsequent bleeding. The clamp is used without a cord dressing and is allowed to remain in place until the cord comes off. Nurses like the clamp because it does not get in the way when the diapers have to be changed or the baby has to be bathed. Dr. Cook's clamp, being made of aluminum, is lighter and less rigid than the stainless steel clamp I have been using, but otherwise appears to be much the same.

Stainless steel clamp

WALTER W. DANIEL, M.D.

Atlanta

Back Copies Available

TO THE EDITORS: I have back copies of *Modern Medicine* for the past two years and would like to give them to someone who can use them.

ELIZABETH HAMPSON, M.D.

Washington, D.C.

¶Dr. Hampson's address is Apt. 54, The Toronto, 2002 P St., N.W.—Ed.

Treatment of Alcoholism

TO THE EDITORS: I noticed with interest the paper of Drs. Harold W. Lovell and John W. Tintera concerning the hormonal aspects of alcohol addiction (*Modern Medicine*, May 15, 1951, p. 81).

I have tried large doses of ACE on a few alcohol addicts and find that it is a relatively effective type of drug therapy in the alcoholic withdrawal, or hangover, state. Other types of varying merit include: glucose and insulin, Coramine, Metrazol, Mephenesin, various sedatives, alcohol, oxygen, and physiotherapy. In the treatment of addiction, ACE was useless after the alcoholic withdrawal state has been overcome, according to the patients' opinions.

The advocated high-fat diet was poorly tolerated, especially by patients with biliary deficiency or spastic colons. In the presence of fatty

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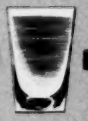
CAN BE TAKEN IN  LARGE OR SMALL  AMOUNTS OF LIQUIDS,

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THE REPUTATION OF THE PHARMACEUTICAL COMPANY

2

THE POTENCIES

3

THE COST TO PATIENT

THE STUART THERAPEUTIC B COMPLEX, C

C ascorbic acid	150 mg.
B_1 thiamin chloride	20 mg.
B_2 riboflavin	10 mg.
B_6 pyridoxin hydrochloride	5 mg.
Niacin Amide	150 mg.
Calcium Pantothenate	10 mg.

Also other members of the B complex as present in liver fraction 2, including identified and unidentified B factors.

THE STUART THERAPEUTIC MULTIVITAMIN

A palmitate	25,000 U.S.P. units
D activated ergosterol	1,000 U.S.P. units
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Niacin Amide	150 mg.

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infiltration of the liver, arteriosclerosis, or coronary disease, serious theoretic considerations contraindicated this diet (A. J. Patek, Jr. *Proc. Soc. Exper. Biol. & Med.* 37:329, 1937; G. H. Becker, J. Myer, and H. Necheles *Science* 110:592, 1949; L. M. Morrison and K. D. Johnson *Am. Heart J.* 39:31, 1950; W. J. Zinn and G. C. Griffith *Am. J. M. Sc.* 220:597, 1950).

Using various methods of treatment alone or in combination, the alcoholic withdrawal syndrome is *not* the most difficult problem in the management of alcohol addiction, although smooth handling of it is most important. Rather, the *pièce de résistance* is the maintenance of sobriety for months and years. I have found that administration of any hormone now available has been of little help here.

However, endocrine treatment—the production of marked endocrine changes wrought by psychotherapy—is the crucial tool in the long-term treatment of many of these patients. It is used to best advantage when based on a psychodynamic orientation and when it concerns itself more with manipulation of the transference relationship (C. L. Brown *Quart. J. Stud. on Alcohol* 9:403, 1950) than with excessive uncovering of unconscious traumatic experiences.

In addition, the patient should have the benefit of any other effective methods of treatment as individually indicated. This may or may not include, for instance, Antabuse, Alcoholics Anonymous, nutritional therapy, hospital or institutional treatment, vocational rehabilitation, contraceptive consultation, or treatment of the wife's somatic or emotional disturbance, depending on the

(Continued on page 24)

goes to work immediately in treatment of WHOOPING COUGH

PERTUSSIS IMMUNE SERUM (HYLAND)

IRRADIATED - HUMAN - DRIED

Hyland Pertussis Immune Serum, prepared from selected hyperimmunized adults, provides an *immediate* supply of protective antibodies. Is of special value in treating very young infants, who usually do not respond well to active immunization.[1]

Prophylaxis Confers protective immunity for approximately 10 to 14 days. Dosage (20 cc. for infants, more for older children and adults) may be repeated as indicated without the risk associated with non-homologous serum.

Treatment Reduction in frequency of paroxysms is most marked when the serum is administered early in the course of the disease[2]. Use of the serum seems to reduce the incidence of complications and the mortality, as well as the course of the uncomplicated disease.[3]

This specific, whole serum is quickly reconstituted to liquid state; simple to administer intravenously or intramuscularly. Supplied 20 cc. dried serum, with suitable diluent. Available from your regular source of supply.

[1]Felton, H.M.: Passive Immunization and Treatment in Pertussis, J.A.M.A. 128:26 (May 5) 1945.
[2]Lucchesi, P.F. and LaBoccetta, A.C.: Whooping Cough Treated with Pertussis Immune Serum (Human), Am. J. Dis. Child. 77:15 (Jan.) 1949.
[3]Queries and Minor Notes: J.A.M.A. 146:75 (May 5) 1951.

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4534 Sunset Boulevard, Los Angeles 27, Calif.

B_{12} (EMF) believed to be APF; may also be "HGF"

Evidence has been accumulated to suggest that vitamin B_{12}—now generally acknowledged to be the pure erythrocyte-maturing factor (*EMF*) or anti-pernicious-anemia (*APA*) factor—may well be identical with animal protein factor (*APF*). APF has been found to be essential for normal growth, and probably for the maintenance of life, in many animal species including chickens, pigs, rats, and mice.

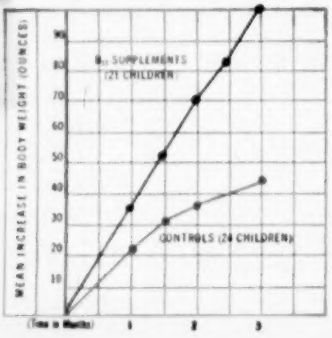
Now there is evidence to suggest that vitamin B_{12} is, or contains, an important human growth factor, or "*HGF*".

Wetzel and his associates[1] found that undernourished children grew much more rapidly on a good diet if vitamin B_{12} was also administered. *Chow*[2] found that in a group of chronically ill children, the experimental group (children who received vitamin B_{12} in addition to a good diet) exhibited a mean gain in body weight practically twice that of the control group (children who received a good diet—without supplementary vitamin B_{12}). This observation was made after three months' therapy with vitamin B_{12}.

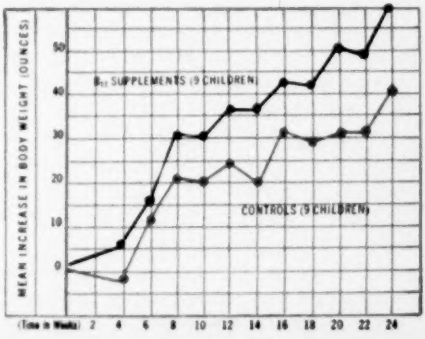
Chow[2] also reported on 18 healthy children in a foundling home. Nine of these children were each given a daily supplement of 25 micrograms of vitamin B_{12}; the other nine received placebos. It was found that the "mean gain in body weight of the children in the B_{12} group was consistently greater than that of the controls from the 4th week onward . . ."[2]

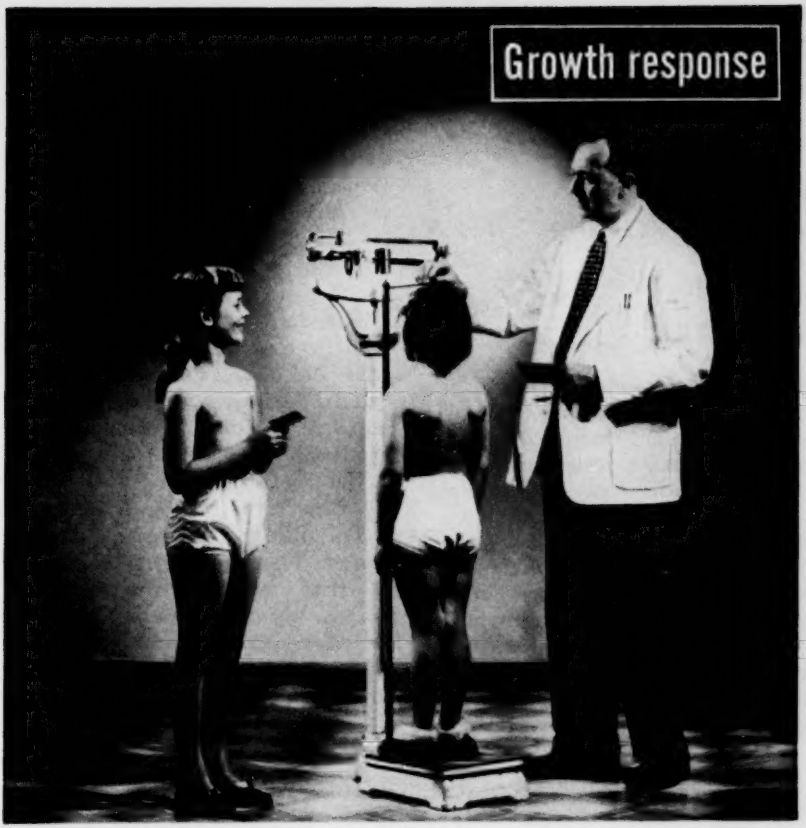
REDISOL® Tablets provide a convenient oral dosage form of vitamin B_{12}. Each tablet contains 25 micrograms of crystalline vitamin B_{12}. REDISOL Tablets are small—easy to swallow. They may be dissolved in aqueous fluids, or added to semisolid foods, just before taking. (Solutions of vitamin B_{12} lose potency if vitamin C is present.)

Growth response in chronically ill children. (After Chow.[2])



Growth response in clinically healthy children. (After Chow.[2])





Recent nutritional studies on children indicate that Vitamin B_{12} may play an important role in the promotion of growth.

Recommended Dose

to stimulate appetite and increase voluntary food intake in infants and children: 1 tablet daily.

for pernicious anemia (maintenance therapy only): 1 to 6 tablets daily.

for nutritional macrocytic anemia and macrocytic anemia of pregnancy: 2 to 4 tablets daily for one week.

for sprue: 2 to 10 tablets daily for one week or longer, depending on response.

Packaging

REDISOL Tablets are supplied in vials of 36.

1. Wetzel, N. C.; Fargo, W. C.; Smith, I. H., and Helikson, J.: Growth Failure in School Children as Associated with Vitamin B_{12} Deficiency—Response to Oral Therapy, Science *110*:651 (Dec. 26) 1949.

2. Chow, B. F.: Sequelae to the Administration of Vitamin B_{12} in Humans, J. Nutrition *43*:323, Feb. 1951.

Sharp & Dohme • Philadelphia 1, Pa.

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Soluble Tablets Vitamin B_{12} For Oral Administration

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...due to Insect Bites
Ivy Poisoning •
Localized Vesicular Areas

CALAMATUM
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affords immediate relief for the itching and discomfort of skin affections prevalent during the summer months. It is a *cream* embodying Calamine with Zinc Oxide and Campho-Phenol in a non-greasy base. CALAMATUM dries at once, adhering to the lesion and thus localizing the infection by preventing spread of any exudate. By alleviating itching with consequent desire for relief by scratching, it reduces the dangers of secondary infection.

WON'T RUB OFF

Easy application without messy liquids and embarrassing bandages, and the handy tube instead of a fragile bottle of lotion encourage applications at any time. In 2-oz. tubes at druggist or direct.

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Kendall Sq. Station • BOSTON 42, MASS.

findings of a comprehensive medical, psychologic, and sociologic inventory.

Psychotherapy produces the desirable changes in endocrine imbalance more efficiently and more permanently than the administration of hormones can. Fright stimulates the anterior pituitary gland and results in widespread metabolic change as shown by Selye (*J. Clin. Endocrinol.* 6:117, 1946).

The aim in psychotherapy is to render the patient permanently more calm and less frightened. Profound endocrine changes are, therefore, the implicit and obvious result of psychotherapy, which may be regarded as the "endocrine therapy" of choice for many chronic alcoholics.

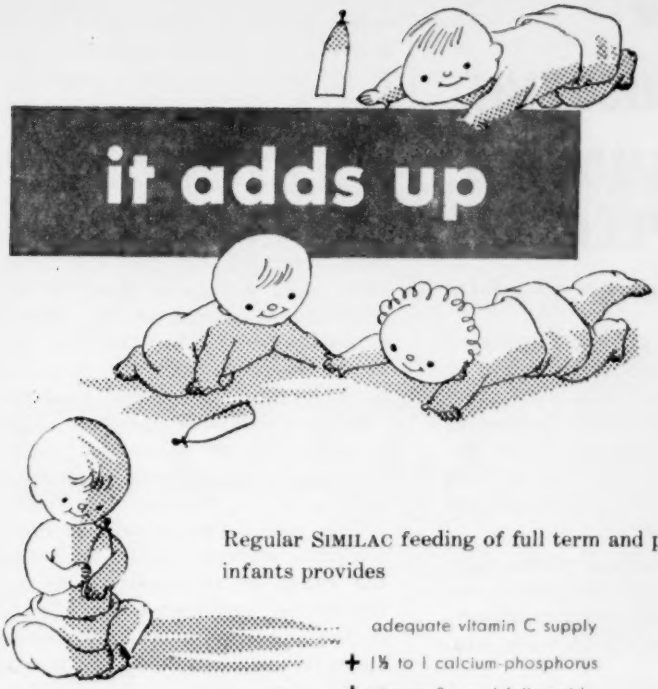
The theory of Drs. Lovell and Tintera regarding the metabolic dysfunction found in alcohol addiction and the alcoholic withdrawal state is interesting. We hope that further study of these changes will be forthcoming.

K. R. BEUTNER, M.D.
Oakland, Calif.

Drug Addiction Among Elderly

TO THE EDITORS: As a G.P. with a considerable number of elderly patients, I am encountering among them more and more cases of drug addiction, dating very often from some surgical operation or chronic illness. Many physicians take the attitude that their patients must be spared the slightest twinge of pain or discomfort and thus issue narcotics prescriptions with almost complete insouciance of the probable results.

Word has been spread by mouth, newspaper, magazine, and radio that while a man is a fool if he drinks



it adds up

Regular SIMILAC feeding of full term and premature infants provides

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In the above respects and, significantly, in modification of fats, proteins, minerals and vitamins specifically for infant feeding,

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LESS NICOTINE

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Sano is a mild, flavorful cigarette that is *not* medicated, *not* mentholated. Sano pipe tobacco, with less than 1% nicotine, also available.

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before 50, he is also a fool if he doesn't after 50. This apparently applies doubly when a heart condition exists. So, if the patient does not actually demand it, the doctor prescribes whisky, in small measured doses at first, to be sure, but the measure tends to get larger.

Many of our aged, frustrated by their relegation to the sick lines after active lives, soon grasp at the solace to be found in the bottle, especially since it has the high approval of the doctor. The "half an ounce diluted with water" soon becomes a 2-oz. shot at least four times a day and, when the financial situation permits greater expenditure, a quart a day is frequently the result.

The poor patient rapidly becomes a terrible problem, raising doubts in the minds of his family as to the wisdom of prolonging the life of such a burdensome creature. Often, again finances permitting, he is sent to a private nursing home which, frequently, is merely a place where the incurables and the undesirables among the aged are sent to die.

Weakness of sphincter, common enough with increasing age, soon becomes frank incontinence, with all the physical and mental distress that accompanies it. Personality changes rapidly set in and, before long, complete physical and mental degeneration. Unhappily, the old often live on for years, completely unable to care for their ordinary needs. My work takes me into many private nursing homes, which have sprung up rapidly of recent years, and I can attest to all I have written.

It is a hollow mockery for the

The informed physicians regularly read
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NEOXYN brings dramatic and rapid relief from the itching of poison ivy, poison oak and poison sumac dermatitis, followed by progressive remission of local inflammation.

Thorough clinical testing in a large series of controlled cases showed 90 per cent effectiveness—relief in less than one hour, and definite evidence of healing within twenty-four hours.

NEOXYN is a water-clear solution, clean and easy to use . . . no chalky deposit, no stain, no grease. One treatment is usually sufficient when directions are followed.

NEOXYN is available at prescription pharmacies in cartons containing a 1 ounce bottle, 2 sterile swabs and 2 wooden blades.

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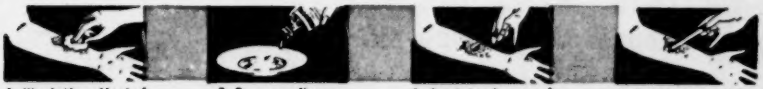
NEOXYN IS EASY TO USE . . . NOT A BIT MESSY . . . AND HIGHLY EFFECTIVE



1. Wash the affected area with soap and water.
2. Pour some Neoxyn in a clean dish.
3. Swab freely on and around the affected area.
4. Scrape area with a Neoxyn-moistened blade.

TRY NEOXYN ON YOUR NEXT CASE OF RHUS DERMATITIS. WRITE US ON YOUR LETTERHEAD FOR A TEST PACKAGE

medical profession to praise itself for increasing the span of life of our citizens, while doing nothing whatever to prolong the usefulness of those lives. Yet we have a responsibility here, for I am sure that these abuses must be quite general over the country.

The number of potent drugs in the hands of physicians continues to grow daily, and there is also an increasing indiscriminate use and abuse of those powerful tools. How many physicians are familiar with the pharmacology of the contents of their prescriptions? I have come across some terrible ignorance on this score among our colleagues. Fortunately, many an ℞ has been corrected by an alert pharmacist before being filled.

Witness the bewildering list of sedatives and narcotics which the simplest surgical procedure calls forth. The operation succeeds more often now than before, but the poor drug-addicted devil might perhaps have been better off if it hadn't.

Drug addiction is front-page news these days, but I hope that no one decides to look into our professional end of it. We as a profession had better begin to police ourselves individually on this score if we are not to be open to attack from this new direction.

HERBERT MOSKOWITZ, M.D.
New York City

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Orally-active, Non-synthetic Estrogens and Thyroid, U.S.P.

Hormotone "T" *Enterosols*

4 Potencies

1,000 International units (1/20 Gr. Thyroid)
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Relieves hot flushes and restores sense of well being.

G. W. Carnrick Co.
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Questions and Answers

about the new

Picker-Polaroid *one minute* radiograph

On March 7, 1951, before the Surgeon General and the staff of the Bethesda Naval Hospital, the Navy demonstrated the Land Process for making one-minute radiographs. The significance of this demonstration and a subsequent televised demonstration on the deck of the U.S.S. Salem was immediately sensed not only by the medical profession but by the press. *To answer the hundreds of inquiries which have been pouring in, we are making this report to you:*

what is the process?

The one-minute, self-development principle of the Polaroid* Land Process, applied to radiography.

what does it do?

It produces a dry, finished radiograph, ready for use, one minute after the exposure is made, *without darkroom processing.*

how does it work?

1 You place the Polaroid x-ray packet in a special daylight-loading 10" x 12" Picker-Polaroid cassette, which fits any standard cassette tray.

2 Make a normal exposure in the usual way, with any x-ray machine.

3 Place the cassette in an automatic motor-driven processing box. Press a button . . .

4 A minute later, remove the finished print, dry and ready for use. There are no liquids present, no chemicals to handle.

what does the radiograph look like?

The image is a positive x-ray image on glossy white paper. It has excellent gradation and good density. You study it without using an illuminator.

is a darkroom needed?

No; you can load and process the radiograph in full daylight.

how will it be used?

While actual clinical experience has been limited, those who have participated during the past few years in the experimental adaptation of the process to x-ray (among them the radiological staff of the Massachusetts General Hospital in Boston) have predicted great usefulness in a variety of procedures: for fracture work, foreign body location, hip pinning and other work where speed is important. It should be useful in the many situations where darkroom facilities are not available or conveniently usable.

what will it cost?

Somewhat more than the direct cost of conventional x-ray film of similar size. When savings in processing, waiting and handling costs are considered, the actual cost difference may vanish.

when will it be available?

The entire output will go first to the Armed Services. It is hoped that by early 1952 production will have reached the point where civilian deliveries can start.

x-ray
POLAROID

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PICKER X-RAY CORPORATION • 300 Fourth Ave. • New York 10, N.Y.

Questions & Answers

All questions received will be answered by letter directed to the petitioner; questions chosen for publication will appear with the physician's name deleted. Address all inquiries to the Editorial Department, MODERN MEDICINE, *84 South Tenth Street, Minneapolis 3, Minnesota.*

QUESTION: A woman 40 years old walks in her sleep and is very nervous. What therapy is advised?

M.D., Illinois

ANSWER: *By Consultant in Psychiatry.* Somnambulism is a motor expression of unconscious fantasies ordinarily manifested through visual imagery or other sensory expression in dreams. The nervous condition is probably the result of such unconscious wishes. Exploratory interviews with the goal of revealing to the patient her unconscious feelings will be therapeutic.

QUESTION: What are the possibilities of a healthy child being born to a 40-year-old woman with syphilis of seventeen years' standing? Both husband and wife have been affected for this period in spite of receiving four series of combined arsenic-bismuth treatments and three series of procaine penicillin treatments of 3,000,000 units each. Is therapeutic abortion indicated?

M.D., Ohio

ANSWER: *By Consultant in Syphilology.* Syphilis has never been an indication for therapeutic abortion. Any one of the following factors would make it practically impossible for the patient to give birth to a syphilitic child: the long duration of the disease, the considerable amount of arsenic and bismuth, and the several courses of penicillin therapy. The preferred steps are adequate treatment of the mother during pregnancy and early diagnosis and adequate therapy of the disease in the child.

QUESTION: After a double sympathectomy for hypertension, a woman suddenly claims to be unable to talk above a whisper and refuses to get out of bed, even into a wheel chair. Severe atrophy and paralysis have developed in the left leg; the right arm is also paralyzed. All reflexes are exaggerated. Cholesterol is 312. Her condition is otherwise good, and she remains stout. Are these sequelae usual with this operation?

M.D., Michigan

ANSWER: *By Consultant in Neurology.* As far as is known, sympathectomy has no particular sequelae. Usually such neurologic disturbances are the result of the original hypertension, not of the operation. There is no anatomic way in which a dysphasia can be caused by this operation, but the extensive neurologic manifestations in this case, as well as the dysphasia, might well indicate fairly extensive disturbance within the nervous system secondary to the hypertension and unrelated to the sympathectomy.

(Continued on page 34)

If experience and "know how" had three dimensions, you could see them behind every tablet of Cholan-HMB with Phenobarbital. Having developed the first American process for converting pure dehydrocholic acid (our Cholan-DH) from crude oxbile, Maltbie scientists have the background to produce a medication of extraordinary purity and uniform potency.

Cholan-DH produces a brisk flow of thin bile for nonsurgical biliary drainage. Cholan-HMB with Phenobarbital is the drug to prescribe for comprehensive therapy—to stimulate bile flow, induce spasmolysis, and provide mild sedation. There are numerous indications for it in everyday practice.

comprehensive therapy in one formula

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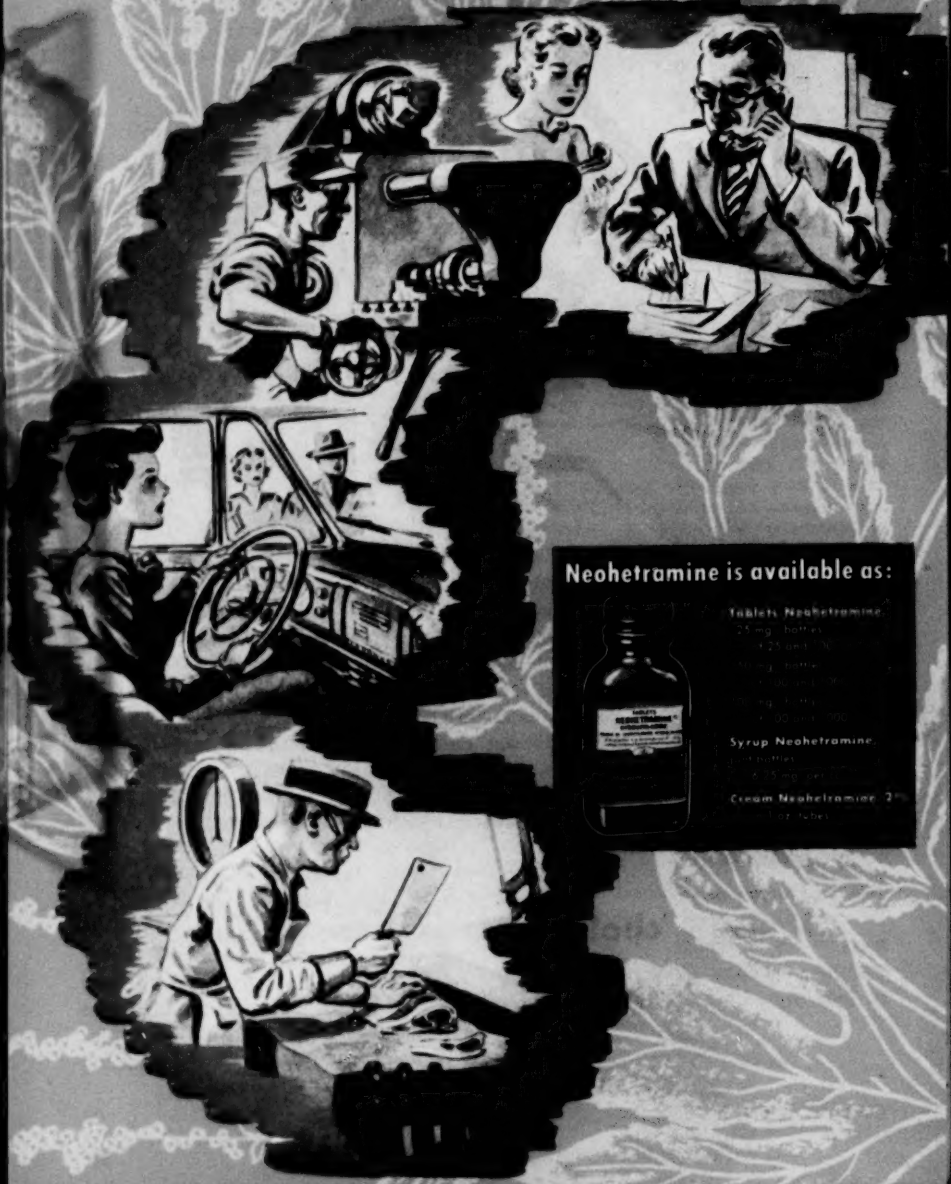
Maltbie Laboratories, Inc., *Newark 1, New Jersey*

For daytime
in effective



Neohetramine is available as:

Tablets Neohetramine

Syrup Neohetramine

Cream Neohetramine

alertness . . .

ragweed hay fever therapy

Drowsiness or diminished alertness can seriously impair concentration, coordination and efficiency. That's why, for daytime use by the active patient with ragweed hay fever, the choice of Neohetramine is doubly indicated: It (1) provides effective relief from rhinorrhea, itching and sneezing; and (2) offers a high degree of freedom from dangerous sedative effects. Indeed, with Neohetramine, compared to many other drugs, sedation is both less frequent and less severe.[1,3] Yet its usefulness is clinically equivalent to that of other preparations; and the drug may often be employed in cases intolerant to other antihistamines.[2] Dosage is 50 mg. to 100 mg. two to four times daily, depending on response, severity of symptoms and number of allergens present.

For patients who have difficulty swallowing tablets, for children, or for use as a vehicle, palatable Syrup Neohetramine, providing 6.25 mg. per cc., may be prescribed. Also available, for local application in the treatment of allergic and other pruritic dermatoses, is Cream Neohetramine 2%.

Professional samples will be sent upon request.

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References:

1. New and Nonofficial Remedies, American Medical Association, Chicago, 1950, P. 29.
2. Friedlaender, S. M., and Friedlaender, A. S.: J. Lab. & Clin. Med. 33:865 (July) 1948.
3. Schwartz, E.: Ann. Allergy 7:770 (Nov. Dec.) 1949.

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N, N-dimethyl-N'-p-methoxybenzyl-N' (2-pyrimidyl) ethylenediamine monohydrochloride. Neohetramine is an original and exclusive development of Nepera Chemical Co., Inc., an organization devoted to the development and manufacture of fine pharmaceutical products.

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SUBLINGUAL ANALGESIC

★ **Absorbed from oral mucosa**
★ **Directly into blood stream**

Enthusiastic clinical reports show: (1) Faster, (2) Longer relief from pain with new, unique Theryl Sublingual Analgesic.[1,2]

Taken Without Water
May Often Supplant Narcotics[2]

One or two tablets are placed in the mouth without water. In less than one minute, the analgesic agent is present in the blood. Here are a few typical reports:

INDICATION OR SURGERY	TIME REQUIRED for ANALGESIA
Post-Appendectomy	3 minutes
Post-Hemorrhoidectomy	3 minutes
Post-Tonsillectomy	2 minutes
Simple Headache	½—3 minutes
Menstrual Pain	5 minutes

Many other dramatic cases reported

1. Hoffman, Murray M., Ill. Dent. Jl., 19:439-445 (Oct., 1950)
2. McNealy, Raymond W., Ill. Med. Jl., 97:150 (Mar., 1950)

FREE Send for Sample and Literature.

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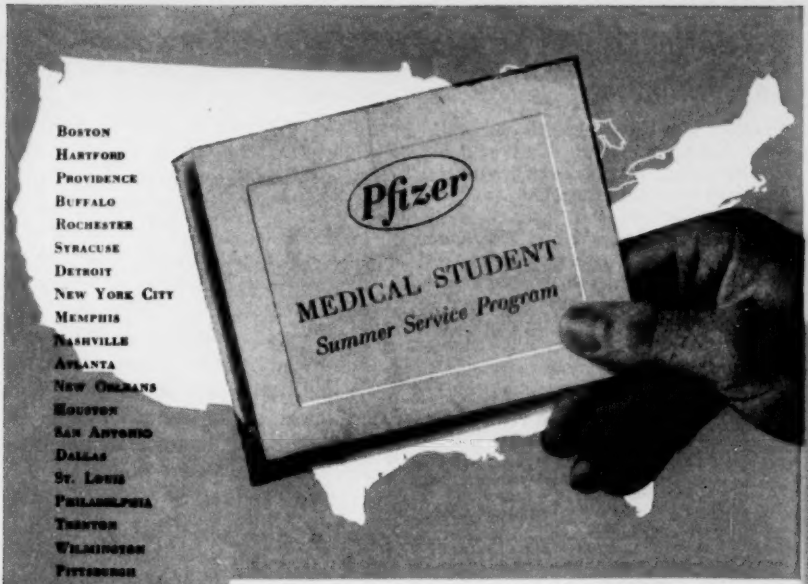
QUESTION: Among my patients is a family of 3 infested with pinworms. The father, mother, and 11-year-old daughter have each had three courses of treatment. At about the ninth day following a course, a worm is discovered in one of them. This has now gone on for six months. They have a dog. Could he be harboring the eggs? What suggestions do you have?

M.D., Wisconsin

ANSWER: *By Consultant in Internal Medicine.* I have never heard of a dog being the host to pinworm eggs. The life cycle of the pinworm is the essence of simplicity since an intermediate host or suitable soil is not needed for embryonization of the eggs. When deposited, each egg contains a larva that is ready to infect man, its one and only host. The deposition of the egg around the anus produces itching. When the region is scratched, the eggs adhere to the fingers from which they are transferred to the mouth, thus completing the cycle.

The simplest form of treatment is cleansing enemas of tepid water given on alternate evenings for six to eight weeks. If the enemas are contraindicated or impractical a one-day treatment is given with quinacrine hydrochloride. The dose is 10 mg. per kilogram of body weight. This amount is taken orally in the morning on an empty stomach and followed three hours later by a tablespoon of sodium sulfate dissolved in water. The dose is halved for children.

Hexylresorcinol is sometimes used after a cleansing enema, and 1 gm. of hexylresorcinol is given orally in the morning; 250 to 400 cc. of 0.1% alkaline solution of hexylresorcinol is injected rectally in the evening to be retained fifteen to thirty minutes. This procedure is repeated on three consecutive days.



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A PIONEER group of 70 medical students, 3rd and 4th year leaders from some of the nation's outstanding medical schools, have been selected for a special course in antibiotics covering recent research and clinical developments. These young men and women are qualified to serve physicians in 36 major cities during their summer vacation and will make available reprints, abstracts, bibliographic research and other data as requested by members of the profession.

At the same time they have the invaluable opportunity of acquainting themselves with current clinical practices of leading general practitioners, specialists, teaching institutions and other professional groups.

This new Pfizer activity will supplement other Pfizer services such as the Antibiotics Newsletter, now being prepared and distributed semi-monthly by the Medical Service Department.

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Relationship of Stress to Autonomic Lability

Studies have shown that functional disorders often are a result of the patient's inability to adjust to emotionally stressful situations (stressor factors).

Nervous tension and chronic anxiety, discharged through a labile Autonomic Nervous System, can cause somatic disturbance. Such states may involve any one of the organ systems or several at one time. The outline below relates gastrointestinal and cardiovascular symptomatology to the exaggerated response of the autonomic nervous system.

	Physiologic Effects of Autonomic Discharge	
	Sympathetic	Parasympathetic
Gastrointestinal	Hypomotility Intestinal Atony Hyposecretion Reduced salivation	Hypermotility Gastrointestinal spasm Hypersecretion
Cardiovascular	Rapid heart rate Peripheral vasoconstriction	Slow heart rate Vasodilatation
Functional Manifestations	Palpitation Tachycardia Elevated B. P. Dry mouth—throat	Heartburn Nausea-vomiting Low B. P. Colonic spasm

Diagnosis of functional disorder is supported by the following indications of autonomic lability:

Variable Blood Pressure; Body Temperature Variations; Changing pulse rate; Deviations in B. M. R.; Exaggerated Cold Pressure Reflex; Glucose Tolerance Alterations.

Therapy in these cases is directed toward: 1) relief of symptoms by drug therapy (so making the patient more amenable to psychotherapy); 2) psychotherapeutic guidance in making adjustment to stressful situations and correction of unhealthy attitudes.

Clinicians report that good therapeutic results are produced by combined adrenergic (ergotamine) and cholinergic blockade (Bellafoline) with central sedation (phenobarbital). A convenient preparation of this nature is available in the form of Bellergal Tablets. Full data on request; write to:

Sandoz Pharmaceuticals

DIVISION OF SANDOZ CHEMICAL WORKS, INC.
63 CHARLTON STREET, NEW YORK 14, N. Y.

Treatment with gentian violet is preferable for adults. Two enteric-coated 32-mg. capsules are given three times daily before meals for eight to ten days. In obstinate cases, 25 cc. of a 1% solution may be given directly into the duodenum. Nausea, vomiting, diarrhea, headache, dizziness, and lassitude may occur but usually subside if dosage is reduced or suspended for a day or two.

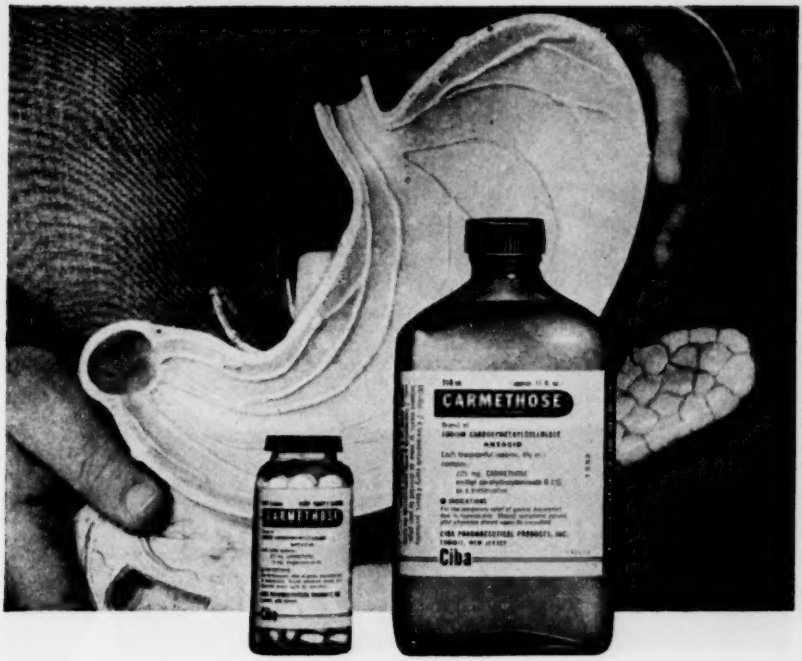
All persons living with the patient should be examined and, if infected, treated. Strict personal hygiene, showers, cleaning of the anal area, and washing of the hands after defecation and before meals are important measures to maintain.

QUESTION: A 30-year-old man has tuberculous testicles. Is there any known method of transplanting a new testicle?

M.D., Mexico

ANSWER: *By Consultant in Urology.* No satisfactory way of transplanting a testicle or testicular tissue from one human being to another exists. A fresh testicle, cut into thin slices, has been imbedded in the rectus muscle, but the effect is very temporary because the tissue is shortly destroyed and absorbed.

Suggested treatment is the oral administration of methyl testosterone, 25 to 60 mg. or more a day, or as an alternative, 25-mg. doses of testosterone propionate in oil may be given intramuscularly, three times a week or depending upon the patient's response. Sterile pellets of testosterone propionate can be implanted into the muscle or deep into the subcutaneous tissue at the thigh. Frequency of implantation should be determined by experience with the individual patient



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Without Side Effects

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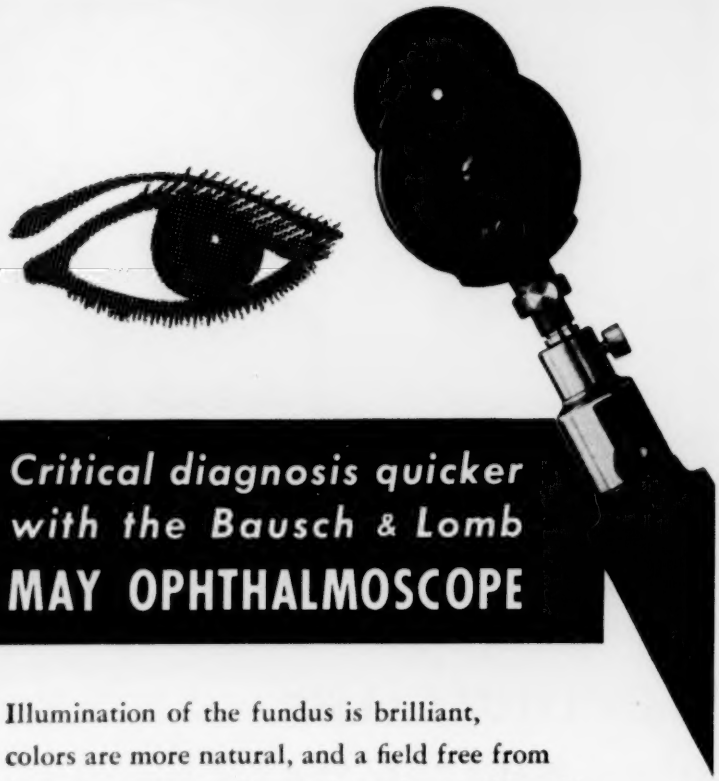
Pleasant to Take — Carmethose Liquid has a pleasant mint flavor with no gritty or chalky taste. The tablets are small and easily swallowed.

No Systemic Disturbance — Carmethose is sodium carboxymethylcellulose which is non-systemic and does not interfere with digestion, absorption or acid-base balance.

DESCRIPTION—Carmethose® Liquid is a 5% aqueous solution of sodium carboxymethylcellulose; in bottles of 12 fl. oz. Carmethose Tablets contain 225 mg. of sodium carboxymethylcellulose and 75 mg. of magnesium oxide; bottles of 100.

DOSAGE—Four teaspoonfuls or four tablets on arising, between meals and before retiring. Or, if indicated, two teaspoonfuls or two tablets every two hours.

Ciba, SUMMIT, N. J. 2/16794



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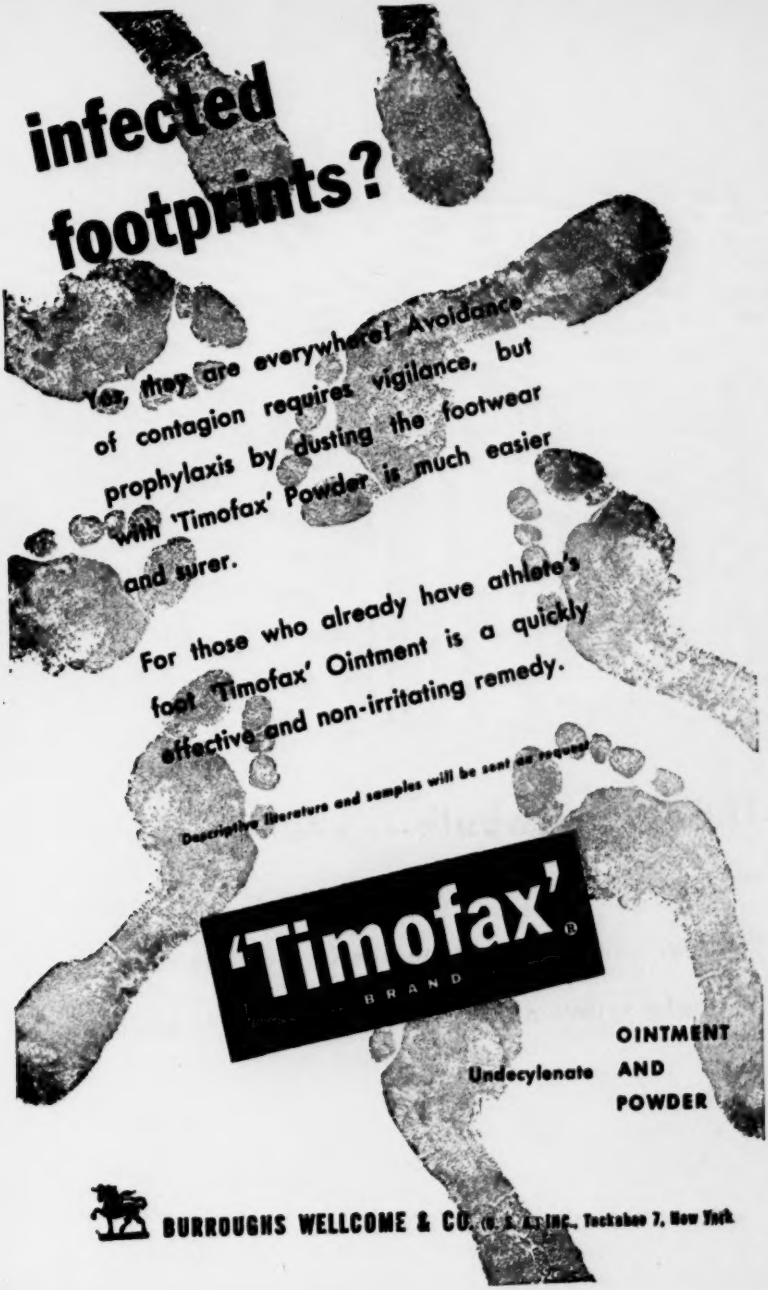
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For those who already have athlete's foot 'Timofax' Ointment is a quickly effective and non-irritating remedy.
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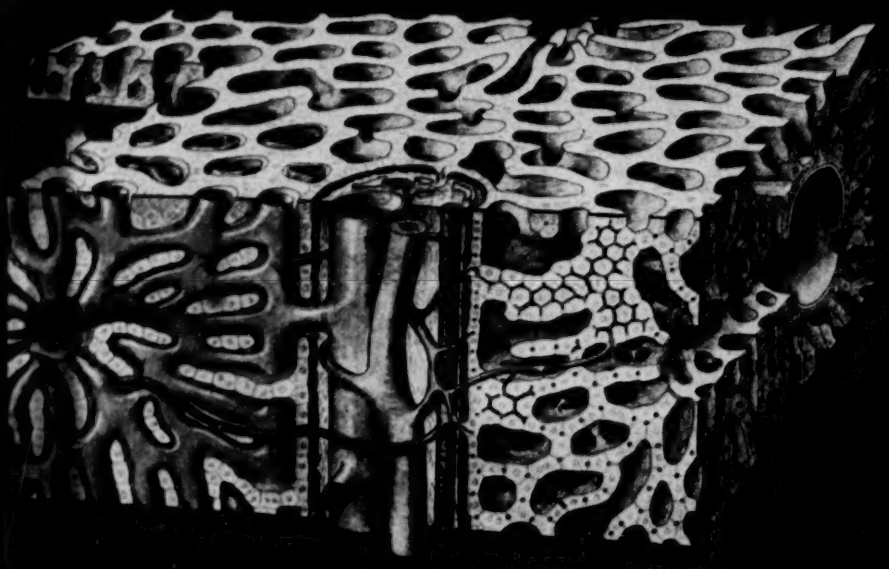

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1. Bulletin of Florida State Dept. of Agriculture, No. 123, pp. 20-30.

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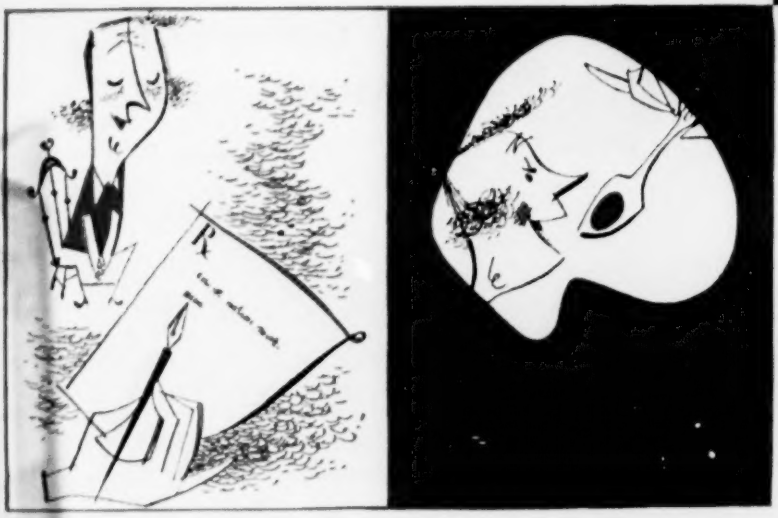

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Book Chapter

Lassitude, Asthenia, and Syncope*

T. R. HARRISON, M.D.†

From a chapter of the book, Principles of Internal Medicine

THE term "weakness" is used by patients to describe a variety of subjective complaints which vary in prognostic significance and import. Most of the subjective disorders included in this term will be found, on careful questioning, to fall logically within the classification of either persistent or recurrent weakness.

Persistent Weakness

When the patient complains of persistent weakness, a sharp distinction must be drawn between lack of energy (lassitude), which is frequently due to emotional disturbances, and the loss of muscular strength (asthenia, debility), which may be due to serious disorders of metabolic or neuromuscular origin or, more commonly, to senility or prolonged bed rest.

Loss of muscular strength may be either: [1] local, involving specific muscle groups (palsy, paralysis) or [2] general, involving the entire musculature (asthenia). The generalized type of muscular weakness will be considered under the title of asthenia, which is less common than lassitude and more likely to indicate serious disease.

Lassitude. Listlessness, malaise, lassitude, undue fatigability, and lack of energy are terms which, while not synonymous,

* From the book, *Principles of Internal Medicine*, edited by T. R. Harrison, Paul B. Beeson, William H. Resnik, George W. Thorn, and M. M. Wintrobe. 1,590 pages. Published by The Blakiston Company, Philadelphia, 1950. $12.

† Professor of Medicine, Department of Internal Medicine, Southwestern Medical School of the University of Texas, Dallas.

shade into each other and are all characterized by loss of that sense of well-being which is typically found in persons who are healthy in both body and mind. Symptoms of this type are present in a large proportion of all patients and have little diagnostic significance unless they constitute the presenting complaint. For the sake of brevity, this group of complaints will be considered together under the term lassitude.

The mechanism of chronic or persistent lassitude, when occurring under physiologic conditions or as a result of organic disease, is unknown; possibly it is related to disturbances of cellular metabolism in the nervous system or in the muscles.

The lassitude which occurs as the result of emotional stress is intimately related to conflict within the personality. If a person is so busy reconciling within himself a myriad of fears, hates, or dissatisfactions, he will be unable to spend energy usefully in productive pursuits. Under such circumstances, lassitude, which is such a common early symptom in neuroses, reactive depression, and psychoses, is to be regarded as a distress signal from an organism laboring under unwelcome stress.

When lassitude is not the patient's chief complaint, the clue to the diagnosis is usually found by investigation of the more troublesome complaints, such as fever, chills, loss of weight, pain, cough, or dyspnea. Thus, with acute infections, malignant neoplasms, or almost any type of serious disease, the other symptoms are in the foreground and are much more likely to have diagnostic significance than is the associated lassitude.

When lassitude is the presenting symptom, the possible causes are less numerous. Perhaps the most common cause in such instances is an emotional disturbance, such as that which so commonly leads to depression, anxiety states, and other neuroses; but since psychic and somatic disorders frequently coexist, it is wise to search for organic disease before concluding that the symptom is entirely psychogenic.

The search should be thorough but prompt, since needless waste of time tends to aggravate an anxiety state, if present. At the same time, the patient should be observed for positive evidence of an emotional disorder and, if such evidence is found or if the diagnosis remains obscure, psychiatric con-

sultation is desirable: The importance of thorough but immediate observation cannot be overemphasized.

Postinfectious lassitude is frequent following almost any severe, acute febrile illness. The symptoms are very similar to those of psychogenic lassitude: Fatigue, palpitation, listlessness, and irritability are commonly present and, in many instances, emotional factors play an important or dominant role. Otherwise, the condition clears up within a few weeks or, rarely, a few months after the acute infection has subsided. Experience gained during the recent war indicates that prolonged rest in bed delays disappearance of postinfectious lassitude, except in the case of infectious hepatitis.

Obscure chronic infections are responsible for lassitude in many instances. Almost any chronic infection may be causative, but perhaps the most common ones in the United States are tuberculosis, rheumatic fever, certain diseases such as subacute bacterial endocarditis and chronic pyelonephritis due to relatively avirulent bacteria, and some parasitic infestations such as malaria and hookworm. The frequency of brucellosis as a cause of lassitude and low-grade fever is uncertain.

Anemia, when moderate to severe, is frequently responsible for lassitude. The severity of the symptom is more apt to parallel the hemoglobin level of the blood than the number of erythrocytes.

Metabolic and endocrine disturbances of various types may produce lassitude. The symptom is likely to be extremely marked, to be associated with true muscular weakness, and to dominate the clinical picture in Addison's or Simmonds' disease. In persons with *hypothyroidism* with or without outspoken myxedema, lassitude is usually pronounced. It is present in many patients with *hyperthyroidism,* although often less troublesome than the associated nervousness.

Any type of *nutritional deficiency* may, when severe, produce lassitude. In the earlier states this may be the only complaint, since objective findings may be absent in many cases, and the only clues as to the underlying disorder may come from the complaint of languor and the dietary history, the diagnosis in some instances being established by chemical studies on blood and urine. Lassitude is commonly the initial symptom in patients with *chronic disease of the liver,* and not

rarely in persons with *diabetes.* It occurs rather constantly in subjects, fortunately rare, with *disorders of the parathyroid glands.*

Almost any type of chronic *exogenous or endogenous intoxication* is likely to be associated with lassitude, which, however, is only rarely the chief complaint. Among the more common examples are *alcoholism, bromism, prolonged ingestion of barbiturates, morphine addiction,* and *uremia.*

Emotional disorders, whether accompanied by severe anxiety, prolonged worry, or other disturbances of psychic function, frequently lead to lassitude and are perhaps the most common cause. The much abused term "neurasthenia" would seem to have a valuable connotation when limited to such instances and when applied with the understanding that it refers to a symptom—psychogenic lassitude—and does not constitute a diagnosis. Patients with "neurocirculatory asthenia" often have well-marked lassitude.

When a patient presents conclusive evidence of a disturbance of the personality or of organic disease, we should not be content to assume that the obvious disturbance is the sole cause of the symptom, but should search for a somatic or a personality disorder as well, remembering that the coexistence of organic and psychogenic disturbances is frequent, and that one of the common causes of emotional disturbance is anxiety concerning the presence of organic disease, either genuine or assumed.

There are numerous other causes of lassitude. The disorders which have been mentioned seem, however, the most common and important.

Acute lassitude. Lassitude of sudden onset is likely to be due to [1] an acute infection, [2] a disturbance of fluid balance, especially one producing extracellular fluid deficit, or [3] rapidly developing circulatory failure of either peripheral or cardiac origin. The lassitude is apt to be accompanied by outspoken objective phenomena (fever, tachycardia, and so on), which dominate the clinical picture.

Asthenia. As compared to the great frequency of lassitude, asthenia is relatively uncommon. The distinction between lassitude and asthenia is not a sharp one, as the former symptom shades into the latter.

All patients with asthenia also have lassitude, but most patients with lassitude do not have genuine asthenia. Before concluding that a person has true loss of strength rather than the more common and less serious loss of energy, one should either be able to demonstrate the muscular weakness objectively or should obtain a story from the patient that he is no longer able to perform specific muscular acts which previously could be done readily.

True asthenia is never due to psychogenic disorders alone and is not likely to result from anemia or the chronic infections, except in their advanced stages. It is observed in the terminal phases of most wasting diseases and throughout the course of severe acute fevers. Its most common causes are senility and prolonged confinement to bed, regardless of the underlying disease process.

When asthenia is the presenting symptom in a patient who is not senile and has not been at bed rest, one should think of the severe forms of the common anemias, of nutritional deficiencies, of the diffuse disorders of the motor system, of the diseases of the thyroid gland, and, finally, of such rare endocrine disorders as Addison's disease and Simmonds' disease.

One not extremely rare cause of asthenia merits special attention—myasthenia gravis. In this remarkable disorder the patient may have nearly normal muscular strength following prolonged rest, but quickly develops fatigue and, eventually, paralysis of the affected muscles following repeated contraction. Since the muscles supplied by the cranial nerves are especially involved, disturbances of vision, of swallowing, and of speech are usually the presenting symptoms. The disorder may be due to excessive destruction by cholinesterase of acetylcholine, which is necessary for muscular contraction. This destruction can be inhibited by cholinergic drugs such as neostigmine.

When more than one member of the family is subject to recurrent attacks of weakness proceeding to the point of actual paralysis but without loss of consciousness, and when such seizures are separated by intervals of good health, one should be suspicious of a rare disorder—familial periodic paralysis.

The mechanism of asthenia, like that of lassitude, is unknown. Probably both symptoms are related to certain yet-

to-be-discovered metabolic changes in the cells of the nervous system or of the muscles.

Evaluation of cause. Although the distinction between lassitude and asthenia is important from the standpoint of both diagnosis and prognosis, the difference is probably quantitative rather than qualitative. Hence, in the remainder of this discussion, they will be considered under the term "persistent weakness."

When obscure persistent weakness is the presenting symptom, the decision as to whether an obscure but active chronic infection exists is made largely on the basis of measurements of temperature, preferably taken at two-hour intervals and under conditions of activity if the resting temperatures are normal; leukocyte count; and sedimentation rate. If any of these functions is persistently elevated, one can be reasonably sure that the patient has either an infection or some other process, such as neoplasm, thrombosis, infarction, or arteritis, which is causing tissue injury. The presence of persistently normal values for these functions makes it unlikely that a bacterial infection exists at a sufficiently active level to cause weakness, but does not exclude parasitic and other infections which may produce weakness by causing anemia or by interfering with nutrition.

Persistent tachycardia, greater than can be accounted for by the level of the temperature, is suggestive of thyrotoxicosis, subacute rheumatic fever, or psychogenic disorder. In the last condition, unlike the other two, the sleeping pulse rate is likely to be normal and the hands, though moist, are usually cold.

The decision as to whether anemia is of sufficient severity to cause weakness can be made readily by measurement of the hemoglobin. When this substance is reduced from the normal level by more than one-third, the patient is likely to complain of weakness. When its value is three-fourths or more of normal, it is unlikely that a complaint of weakness can be ascribed to anemia. Once anemia of significant degree has been demonstrated, the problem becomes that of determining its nature and cause.

In deciding whether advanced nutritional deficiency is responsible for weakness, one can rely on objective methods.

In the earlier stages of the deficiency diseases, the chief reliance has to be placed on the patient's dietary history, supplemented, in certain instances, by the use of saturation tests and so forth.

In the decision concerning the possible causative role of endocrine and metabolic factors, the examination of the skin (texture, warmth, moisture, distribution of hair, pigmentation, and so forth), the heart rate, the blood pressure, the palpable endocrine organs (thyroid, ovaries, and testes), as well as measurements of certain constituents of blood and urine (sugar, sodium, iodine, cholesterol, calcium, phosphorus, and phosphatase), plus certain special determinations (basal metabolic rate, glucose tolerance, eosinophil count, calcium balance, and so forth), are of especial importance.

The story as regards habits (alcohol), occupation (lead, and the like), and drugs offers the main clue for the diagnosis of exogenous intoxication as the cause of weakness.

The social history concerning the patient's happiness and problems in relation to home, work, and finances is essential in the decision as to whether the weakness is of emotional origin.

The considerations which have been mentioned will lead to an accurate evaluation of the cause of weakness in many patients. Even so, there will remain a group of subjects, unfortunately not rare, in whom the most exhaustive investigation fails to uncover the cause. In some such instances time will furnish the answer, but in others the patient will eventually recover entirely from his weakness while the cause remains obscure.

Recurrent Weakness and Syncope

Many patients complain of seizures of faintness, dizziness (which, when not associated with vertigo or a sense of rotation, usually means lightheadedness), momentary decrease in alertness, or simply weak spells. Since these various sensations are not readily definable and shade into each other, and since a temporary loss of vigor and alertness is common to them all, they may be considered together.

Furthermore, in many instances the seizure may proceed to momentary loss of consciousness or syncope, and hence

this symptom may likewise be logically considered in any discussion of recurrent weakness. As a general rule it may be stated that almost any disorder which, when of mild degree, produces momentary weakness may, when more severe, produce syncope.

Although much remains to be learned concerning the pathogenesis of this group of disorders, it is certain that some of the causes, and probable that most of them, induce faintness by leading to temporary disturbances in the metabolic processes in the brain. Such disorders may be divided into those in which the disturbance is clearly the result of diminished flow of blood, those in which the disorder results from a change in the composition of the blood, and those which are induced by primary disorders of the nervous system.

Important causes. The most common causes of recurrent weakness and recurrent syncope are idiopathic epilepsy, emotional disturbances, spontaneous hypoglycemia, postural hypotension, carotid sinus hypersensitivity, and temporary disturbances of the cardiac rhythm. Since the attacks are of brief duration, the patients are not likely to be seen during the spontaneous seizures. The diagnosis, therefore, depends in large measure on a carefully taken history concerning the attacks and on the physician's ability to reproduce the seizures, once the cause is suspected.

The majority of conditions which produce recurrent weakness are not dangerous. The attacks are likely to be interpreted by the patient, and occasionally by the physician, as being due to serious disease of the circulatory apparatus or of the nervous system.

Hence, most of the patients with recurrent weakness and syncope suffer from anxiety out of all proportion to the seriousness of the condition. When the mystery has been solved, the condition is usually at least moderately amenable to treatment and, once its exact significance has been explained to the patient, his fears are ordinarily alleviated. Here, as elsewhere in medicine, a careful analysis of symptoms, coupled with a clear understanding of their mechanism, enables the physician to have a happier as well as a healthier patient.

The chief causes may be outlined briefly.

Temporary decline in cerebral blood flow

Local: Cerebral vasospasm (hypertensive encephalopathy). Temporary disturbances of motor or sensory function, often accompanied by loss of consciousness, commonly associated with an increased elevation of blood pressure in an already hypertensive subject

General

1] Cardiac

a] The several types of paroxysmal rapid heart action; instantaneous onset of tachycardia, with heart rates of 150 or more, lasting a few minutes to several days

b] Bradycardia

[1] Neurogenic (reflex bradycardia from carotid sinus)

[2] Myogenic—heart block (Adams-Stokes syndrome)

c] Mechanical hindrances to the heart (left atrial thrombus temporarily occluding mitral orifice; aortic stenosis)

2] Peripheral

a] Psychogenic (due to sudden decline in blood pressure, resulting from emotional stimuli)

b] Postural hypotension (decline in blood pressure in the standing position)

[1] Venous pooling (varicose veins; deficient muscular tonus)

[2] Inadequate postural vasoconstrictor reflex (disease of spinal cord; long bed rest)

Temporary disturbances of the composition of the blood

Hypoglycemia (attacks of faintness, induced by insulin or occurring spontaneously two to four hours after meals)

Tetany and allied conditions

1] Hypocalcemia

2] Carbon-dioxide deficiency resulting from hyperventilation (hysterical hyperpnea)

3] Sodium chloride deficiency from excessive sweating

Primary disorders of the nervous system

Epilepsy (idiopathic and jacksonian)

Hysterical fits

Differential diagnosis. When faintness is related to diminished cerebral circulation caused by cardiac disorders, there is likely to be a combination of pallor and cyanosis, dyspnea is frequent, and the veins may be distended. If, however, the peripheral circulation is at fault, pallor is usually striking but is not accompanied by cyanosis or respiratory disturbance, and the veins are collapsed.

When the primary disturbance lies in the cerebral circulation, the face is apt to be florid and the breathing slow and stertorous. When the patient is seen during the attack, a heart rate faster than 150 per minute speaks for an ectopic rhythm, while a striking bradycardia (rate less than 30) suggests the presence of complete heart block and an Adams-Stokes seizure. In a patient with faintness or syncope attended by bradycardia, one has to distinguish between the neurogenic (reflex) and the myogenic (Adams-Stokes) types. Occasionally, electrocardiographic tracings will be needed, but as a rule, the Adams-Stokes seizures can be recognized by their longer duration, by the greater constancy of the heart rate, by the presence of audible atrial sounds, and the marked variation in intensity of the first sound, despite the regular rhythm.

The color of the skin, the character of the breathing, the appearance of the veins, and the rate of the heart are, therefore, valuable clues in diagnosis if the patient is seen by the physician during an attack. Unfortunately, the physician does not often have this opportunity and has to rely upon the patient's story for the proper clue. It is, therefore, of primary importance to be familiar with the circumstances and the precipitating and alleviating factors in regard to a given cause.

Of the several factors which may be helpful in arriving at a diagnosis, the following are often especially valuable:

Type of onset—When the seizure begins instantaneously, a disturbance of the cardiac rhythm is probably at fault. When it sets in over a period of a few seconds, carotid sinus syncope or postural hypotension is likely. An aura at the onset suggests idiopathic epilepsy.

When the symptoms develop gradually during a period of several minutes, hypoglycemia, spontaneous or induced by insulin, is to be considered. Onset of syncope during or immediately after exertion is common in patients with

aortic stenosis and in elderly subjects with postural hypotension; exertional syncope is likewise occasionally seen in persons with aortic insufficiency.

Position at onset—The position at the onset of the attack is of diagnostic import. Attacks due to hypoglycemia and hyperventilation, cerebral vasospasm, or changes in cardiac rhythm are likely to be independent of posture. Seizures associated with a decline in blood pressure, including carotid sinus attacks, usually occur only in the sitting or standing position, while weakness resulting from orthostatic hypotension or orthostatic tachycardia is apt to set in immediately after change from a recumbent to a sitting position.

Associated symptoms—The associated symptoms during the seizure are important. Palpitation is likely to be present when the attack is due to disturbance in cardiac rhythm or to hypoglycemia, while numbness, a "drawing" feeling in the extremities, or irregular jerking movements without loss of consciousness are usual during attacks of hysterical hyperpnea. Genuine convulsions during the seizures are most common in epilepsy but occasionally occur in hysterical fits, hypoglycemia, and heart block.

Duration of seizure—When the duration of the seizure is very brief, a few seconds to a few minutes, one thinks particularly of carotid sinus syncope, emotional syncope, the petit mal type of epilepsy, or postural hypotension. A duration of more than a few minutes, but less than an hour, is particularly suggestive of hypoglycemia.

Reproduction of attacks—In many patients who do not have spontaneous seizures while under the observation of the physician, the most valuable method of diagnosis consists in an attempt to reproduce the attacks. Here, due allowance must be made for the effects of suggestion, and rigid controls are necessary. Thus if one wishes to determine whether the seizures in a given subject are reproducible by insulin injection, and thereby confirm a suspected diagnosis of spontaneous hypoglycemia, it is necessary to control the observations by injecting other drugs such as atropine, nitroglycerin, or histamine, which produce definite symptoms that are different from those caused by insulin. When properly controlled, the insulin test is of great value in the diagnosis of spontaneous hypoglycemia. Without such controls the procedure is useless.

Other conditions in which the diagnosis is commonly clarified by reproducing the attacks include carotid sinus hypersensitivity (pressure on one or the other carotid sinus), orthostatic hypotension and orthostatic tachycardia (observations of pulse rate, blood pressure, and symptoms in recumbent and standing positions), and hysterical hyperpnea (determining whether the symptoms occur when the patient undertakes prolonged voluntary hyperventilation). In all such instances one should remember that the crucial point is not whether symptoms are produced, since the procedures mentioned frequently induce symptoms in healthy persons, but whether the exact pattern of symptoms which occur in the spontaneous attacks is reproduced in the artificial seizures.

The most common type of syncope is the psychogenic (vasovagal, vasodepressor) type. The diagnosis rarely offers difficulty because of the clear relationship to emotional stimuli, if one searches for them carefully.

Perhaps the most frequent cause of obscure recurrent attacks of weakness without syncope is spontaneous hypoglycemia. This condition, when severe, is likely to be dependent on a serious underlying cause such as a tumor of the islets of Langerhans, or advanced adrenal, pituitary, or hepatic disease. In such instances, loss of consciousness is common.

However, when mild, as is usually the case, hypoglycemia is commonly related to improper dietary habits and can usually be diagnosed by the following criteria: The subjects usually ingest large quantities of carbohydrates and relatively little protein. The attacks are prone to occur two to five hours after the preceding meal, and do not occur within an hour after eating.

During the seizures, faintness, anxiety, sweating, giddiness, palpitation, choking sensations, and vague precordial discomfort are common. The symptoms during the seizure are not strikingly relieved by the recumbent position; this feature may be of value in differentiation from the conditions dependent on diminished cerebral blood flow.

The attacks can be alleviated by the ingestion of orange juice or other carbohydrate-containing foods. The fasting blood sugar is often normal, but the values attained three hours after the ingestion of glucose are usually either somewhat subnormal or within the lower limits of the normal range.

The seizures can be reproduced by the injection of insulin and can usually be prevented by a diet low in carbohydrate and high in protein, administered in small, frequent feedings. This disorder is very common and is frequently misdiagnosed as either organic heart disease or neurosis.

Other common and frequently overlooked causes of recurrent weakness are carotid sinus hypersensitivity and postural hypotension. The former condition is diagnosed by reproduction of the symptoms through pressure on the appropriate area. It should be recognized that the sensitivity to carotid sinus pressure bears a relation to circumstances: position, blood sugar level, and drugs affecting vagal tone.

Postural hypotension is of two general types, one occurring in the presence of organic disease of the nervous system, especially that associated with diabetes and tabes dorsalis, the other occurring in elderly subjects, usually men, who have lost weight and whose muscles have become flabby through lack of exercise. The story of weakness or syncope coming on immediately after change from the recumbent to the standing position usually furnishes the initial lead. The diagnosis is confirmed by measurements of blood pressure in the two positions and by prevention of the symptoms by various methods which tend to prevent the decline in blood pressure in the upright position—abdominal binders, vasoconstrictor drugs, or sleeping with the head of the bed elevated.

Epilepsy—Whether of the idiopathic or the jacksonian (focal) variety, epilepsy is one of the most common causes of repeated loss of consciousness.

Because of its frequency, epilepsy is often erroneously considered to be the cause of syncopal attacks brought on by one of the conditions previously mentioned. The history of onset in childhood or during adolescence, the characteristic aura prior to the seizure and electroencephalographic pattern, and the lack of evidence of circulatory or chemical disorders capable of causing syncope usually point the way to the diagnosis, provided it is remembered that some patients with the milder form may have seizures lasting only a few seconds.

The Young Coronary Patient

MENARD M. GERTLER, M.D.*
Columbia University, New York City

EACH year approximately 150,000 Americans die of coronary artery disease, frequently without warning. Males of a special type are usually involved.

Why should robust and apparently very virile young men be particularly susceptible?

In search of the cause, both affected and healthy adults were examined with regard to body build, physiology, biochemical and endocrine alterations, personal history, heredity, and sociologic status. The research project was carried out at the Massachusetts General Hospital, Boston, under the guidance of Paul D. White, M.D. Collected data were summarized by Menard M. Gertler, M.D.

The results suggested that individuals likely to have myocardial infarction can probably be identified well in advance of actual illness.

Especially helpful in selecting persons predisposed to coronary heart disease is a formula incorporating serum uric acid, total cholesterol, and lipid phosphorus. Coronary predisposition may be associated with subnormal sterone excretion.

The subjects were 97 men and 3 women less than 50 years of age. All had coronary heart disease starting before the age of 40. Each was hospitalized and examined for a period varying from twenty-four hours to two weeks.

A matched control group was surveyed, and 146 men were investigated in the same way but without admission to the hospital.

Body build of coronary subjects, classified by the Sheldon method, was predominantly muscular, with a slight tendency toward corpulence. Thin physiques were virtually immune.

More than two-fifths of the cardiac males were well muscled, but less than one-fifth of the healthy group. Only 7% of the patients were slender, although the proportion in the normal persons was 22%. Average weights for the two groups did not differ by more than a few pounds.

The uric acid content of sera was about 5.13 mg. per 100 cc. with heart disease, 4.64 without, and was above 6 mg. for a fourth of the cardiac but for only 6% of healthy subjects.

Serum cholesterol of the coronary group was 285 mg. per 100 cc., or about 60 mg. above the normal average. Individual values of test groups overlapped, however, suggesting that other factors are active.

Serum phospholipids rose with age in all cases but less with cardiac involvement. The ratio of total cholesterol to lipid phosphorus is, there-

* Some morphologic, hormonal, biochemical, and sociologic aspects of the young coronary patient. Bull. New England M. Center 13:74-76, 1951.

fore, more significant than either value alone.

The use of a diet low in cholesterol for heart disease may be questioned. The affected persons ate only 3.3 gm. weekly, or 0.6 gm. less than was consumed by the others. The levels in serum were not related to amount of cholesterol ingested in either case.

Thyroid function is apparently unchanged with coronary involvement.

Daily sterone excretion in urine may be low before coronary episodes. With actual disease, sterone excreted was 10 mg., not significantly under the normal limit, but fairly often dropped below 6 mg. In fatal cases the mean was less than 8 mg., a definite reduction.

Therapy of Peripheral Vascular Disease

ROY J. POPKIN, M.D.*

THE dihydrogenated alkaloids of ergot give symptomatic relief in cases of arteriosclerosis obliterans, thromboangiitis obliterans, Raynaud's syndrome, and obstructive edema of the extremities.

Greater benefit occurs in organic occlusive disease than in vasospastic disorder. The lower extremities improve the most, while the upper are rarely helped. Roy J. Popkin, M.D., of the Cedars of Lebanon Hospital, Los Angeles, explains the therapeutic action of these drugs on the basis of central depressant action on vasomotor centers. A relaxation of the normal tone of collateral and tributary vessels is achieved with resulting increase in blood flow to the limb.

A satisfactory therapeutic preparation of the alkaloids is an equimixture of dihydroergocristine, dihydroergocornine, and dihydroergokryptine, known as CCK 179. Each oral tablet contains a total of 1 mg. of active substance consisting of 0.33 mg. of each alkaloid. Dosage in all cases is an individual affair. Most patients take 1 tablet daily for a week, 2 for a week, then 3 for a week. Dosage is next reduced to 2 for a week, 1 for a week, and the course is repeated again, starting with 1 tablet, after a week without dosage. Often results are improved by one to two supplemental injections weekly of 1 cc. of parenteral solution containing 0.3 mg. of CCK 179. Toxic side reactions are rare. Gastric distress and constipation may occur.

Beneficial results include increased surface temperature of the extremities, greater cold protection, longer walking distance, better ulcer healing, and partial relief from paresthesias, rest pains, and nocturnal cramps. Edema may be decreased.

* An evaluation of some dihydrogenated alkaloids of ergot in the management of chronic peripheral vascular diseases. Angiology 2:114-124, 1951.

ACTH for Chronic Bronchial Asthma

MAURICE S. SEGAL, M.D., J. AARON HERSCHFUS, M.D.,
AND LEON LEVINSON, M.D.*
Tufts College, Boston

ACTH apparently produces remissions in chronic bronchial asthma more consistently than any other agents used.

Short intensive therapy is effective even for previously intractable asthma. High blood pressure and heart failure are not contraindications, if salt restriction and other suitable measures are employed.

Maurice S. Segal, M.D., J. Aaron Herschfus, M.D., and Leon Levinson, M.D., report that attacks were partly or entirely relieved by ACTH for 19 of 20 patients. During an eight-month period, 2 patients received three courses of treatment, and 3 patients, two courses. In 1 instance, two intensive courses failed to bring remission. All patients were seriously ill and chronically disabled with recurrent status asthmaticus, which had lasted one to thirty years.

Chronic bronchial asthma is probably a result of poor adaptation. Under stress, the pituitary fails to stimulate the adrenal cortex adequately, and ACTH must be supplied. The hormone should not be given inconsiderately, because repeated administration may suppress adaptation reaction.

Before and during treatment, blood eosinophil level is determined by Randolph's method to show the degree of adrenal stimulation. In most cases, at least 90% of eosinophils disappear for long intervals, and a drop of more than 50% is generally associated with symptomatic relief.

Counts are made daily about four hours after injection of the hormone. Values are often very high before therapy and during remission.

ACTH is given every six hours, 40 mg. in each of the first two doses, then 20 mg. until the greatest benefit has been attained for two days. The interval is then increased to eight hours, and if improvement continues for one or two days, to twelve hours, usually by the fifth day.

If 100 mg. does not produce adequate eosinopenia, the schedule is revised upward. Especially for severe asthma, doses should be larger and duration of therapy longer than generally believed. For a single course, the amount ranges from 240 to 900 mg. and length from two and a half to nineteen days.

When ACTH is begun, other therapy is usually stopped, except potassium iodide, chloral hydrate and sodium bromide mixtures, or Demerol for sedation and intravenous aminophylline for violent paroxysms.

Aminophylline is commonly discontinued after the second day, and bronchodilating sprays after one to

* ACTH and chronic bronchial asthma. GP 3:33-39, 1951.

five days of hormone therapy. If the respiratory tract is infected, antibiotics should be given for several days.

Various ailments thought to be exacerbated by ACTH are often unaffected or even relieved. Treatment may be advisable in spite of severe hypertension, chronic cor pulmonale, latent or frank congestive heart failure, or diabetes mellitus.

Vigorous measures are required for cardiac complications, however. To lessen edema, electrolyte balance is maintained and weight is carefully recorded. A rigid low-salt diet, digitalis, mercurial diuretics, potassium chloride, and oxygen may be necessary.

A successful course eliminates most or all signs and symptoms of bronchial asthma and greatly reduces the need for adrenergic and other preparations. Relief may continue for a week to many months.

After withdrawal of ACTH, rectal injection of aminophylline is ordinarily required, with or without aerosols. Rarely, 1 or 2 tablets per day of Hydryllin and potassium iodide are sufficient. If breathing capacity is limited and intrapulmonary exchange good, pulmonary function should be restored as far as possible.

During ACTH therapy of arthritis, 30 mg. daily seems to eliminate asthmatic attacks. Maintenance doses produce undesirable physiologic reactions, however, and intermittent courses are usually preferred.

¶ AMEBIC DYSENTERY is treated by terramycin as effectively as by emetine, whether involvement is slight or severe. Adults should receive 2 gm. daily for ten days. Children weighing up to 75 lb. are given 1 gm. per day. Various schedules were tried in 54 cases by Harry Most, M.D., and Frederick van Assendelft, M.D., of the New York University–Bellevue Medical Center, New York City. Among 37 patients given adequate amounts of terramycin only 1 relapse occurred in periods of observation ranging up to about seven months.

Am. J. Trop. Med. 31:284-285, 1951.

¶ CHRONIC PEPTIC ULCER increases the risk of coronary atherosclerosis and thrombosis. Since the high-fat content of the Sippy diet may be an important factor, says Lester M. Morrison, M.D., of the College of Medical Evangelists, Los Angeles, use of protein supplements might be safer than constant feeding of whole milk and cream. Myocardial infarction was discovered in 23% of 116 fatal cases of chronic peptic ulcer. Among several hundred autopsy records analyzed, the rate with other chronic diseases was 11%, acute illness 8%, malignant neoplasm 6%, alcoholic cirrhosis 5%, and toxic thyroid 4%.

Rev. Gastroenterol. 18:313-324, 1951.

Radical Surgery for Malignancy

GEORGE T. PACK, M.D.*
Memorial Cancer Center, New York City

THE extent of present-day surgical procedures for cancer is apparently limited only by the demands of the human remnant for survival. Previous technical hindrances are largely overcome by recent advances in surgical skill, pre- and postoperative care, and anesthesiology.

Cancer surgery has evolved from limited excision of the tumor to complete removal of the organ involved and, more recently, to evisceration or exenteration of adjacent structures. Experience is constantly altering the surgeon's concept of organs necessary for existence.

However, mere survival is an incomplete goal. The patient must be accorded first consideration. Cancer should never be considered an excuse to demonstrate technical ability at the operating table. Further, the correct measure of palliation in noncurable cases is the patient's comfort during his remaining life, rather than the length of postoperative survival. For example, a patient with leukoplakia of the oral cavity and multicentric cancers, at intervals of years, underwent glossectomy, total laryngectomy, and, finally, esophagectomy—a surgical triumph, even though the man couldn't talk, chew, or swallow! The patient committed suicide, adds George T. Pack, M.D.

Yet, the surgeon may justifiably remove multiple organs if the possibility of cure exists and the patient is thereby given a reasonable chance of a life worth living.

Radicalism in cancer surgery is being more and more widely accepted. Such operations are no longer performed by a few skilled surgeons. In all but the smallest communities are found surgeons capable of coping radically with cancer.

Great strides have been made in the treatment of most malignant diseases. A cancer of the larynx which has spread beyond that organ is now commonly subjected to a one-stage radical procedure such as total laryngectomy with either radical neck dissection or cervical esophagectomy.

Major intraoral cancers are currently treated according to the principle of excision and dissection in continuity. Cancer of the tongue, cheek, inferior alveolus, or floor of the mouth may be treated by a one-stage combined procedure entailing neck dissection, mandibulectomy, excision of cheek alveolus, and floor of the mouth, and even glossectomy. Such a procedure will decrease the chances of leaving malignant cells lodged in the lymphatics between the primary tumor and the regional nodes.

Radical mastectomy for mammary cancer may now be extended by supraclavicular dissection with removal of clavicle and first rib. Inter-

* Argument for radicalism in cancer surgery. Am. Surgeon 17:271-278, 1951.

scapulothoracic amputation or lower neck dissection should be considered when indicated by the extent of the tumor. Since about 6% of patients with breast cancer eventually have bilateral tumors, simple mastectomy on the contralateral side should be considered and suggested to the patient as a routine accompaniment of radical mastectomy.

Carcinoma of the skin and melanomas requires block dissection of skin, tela, and superficial fascia from the site of the tumor to and including the regional lymph nodes. Separate incisions for the cancer and nodes often fail to achieve a cure because of malignant cells in the small intercalated nodes between the incisions.

If lymph node metastases from a cancer of the leg reach the groin, a hip joint disarticulation with deep iliac node dissection is indicated. Similarly, axillary node metastases from a malignant tumor of the arm should be combated by interscapulothoracic amputation combined with a lower neck dissection. Sacroiliac disarticulation, hemipelvectomy, offers the only hope for cure of tumors of the bony pelvis, buttocks, or groin.

Surgery for cancer of the gastrointestinal tract becomes more radical each year. Esophagectomy with intrathoracic esophagogastrostomy is often employed for cancer of the esophagus and gastric cardia.

Total gastrectomy is gradually replacing less extensive resections for all but well-localized stomach cancer. An adequate margin of normal appearing gut should be removed both above and below the tumor. All perigastric nodes and the great omentum are removed routinely. When involved with tumor, adjacent organs such as the transverse colon, mesocolon, pancreas, and left hepatic lobe are removed.

Carcinoma of the left colon is probably better treated by hemicolectomy than by local excision and anastomosis, since the former procedure insures more adequate removal of nodes which may be cancerous.

A recent innovation of the abdominoperineal operation for rectal cancer is the addition of obturator and iliac node dissection. Bilateral oophorectomy may also prevent some recurrences of rectal cancer, since metastases occasionally lodge in the ovary.

The indications for conserving the anal sphincter are paradoxic when dealing with rectal cancer. The sphincter is left intact only when the tumor seems unquestionably curable by primary resection or when no hope for a cure remains and the operation is palliative only.

Many superficial cancers of the anus are cured by radiation therapy. Regional node metastases or a tumor of the anal canal requires radical surgery. The best procedure is abdominoperineal rectal resection with bilateral intraabdominal iliac and obturator node dissection and extensive removal of perianal tissue in continuity with bilateral inguinal and femoral node dissection.

Because of the tendency of malignant tumors of the vulva to be multicentric, best treatment consists of radical vulvectomy with bilateral groin dissection and removal of the lower third of the vagina.

For advanced cancer of the corpus uteri, the vagina should be removed

as part of complete pelvic evisceration. Vaginectomy is necessary to check the frequent retrograde spread of uterine cancer to the vaginal region. Total cystectomy with ureterosigmoid implantation and abdominoperineal rectal resection should also be done when a cancer of the uterus has invaded rectum and bladder.

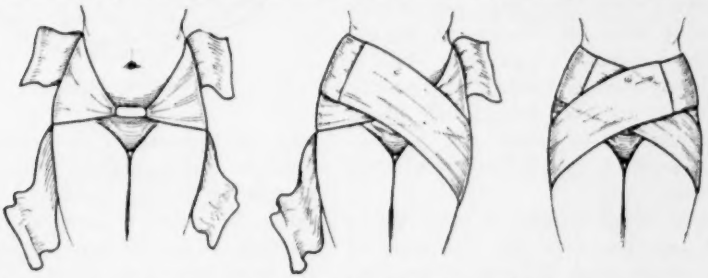
Isolated visceral metastases, even when remote, are now frequently removed by such procedures as pulmonary lobectomy, partial hepatectomy, or craniotomy. In the past, such operations would have been considered poor surgical judgment, but an increasing number of living patients attest to the practicability of these procedures in properly selected cases.

Girdle for Patients with Enteroptosis

ROLAND LEVEN, M.D.*

WHEN the abdominal organs are prolapsed, correct anatomic position should be maintained by external means until the cause of the ptosis can be eliminated.

Roland Leven, M.D., of Paris has designed a girdle that raises the lowered organs and relieves traction on the solar plexus (see illustration). The garment, which is fashioned of strips of flexible



lastex fastened by hooks, stays in place and applies pressure in two directions:

Upon a narrow area above the pubes, to raise the abdominal organs.
Upon a large area below the umbilicus, to keep the elevated organs in position.

The girdle extends below the gluteal fold thus assuring stability. Elasticity of the material permits suprapubic support even with emaciated patients. With obese patients the angular opening at the top prevents a bulge. The girdle may also be employed for postoperative support and to relieve visceral ptosis in pregnancy.

* Instruments nouveaux. Presse méd. 59:119, 1951.

Resection of the Cardia

H. KRAUSS, M.D.*

Kreiskrankenhaus, Göppingen, Germany

WHEN the upper part of the stomach and the lower part of the esophagus must be removed, approximation of the distal stomach with the short esophagus is difficult. To restore continuity of the gastroesophageal tract to as nearly normal conditions as possible, H. Krauss, M.D., has devised a supradiaphragmatic procedure that joins the esophagus to the stomach and leaves an intrathoracic gastric pouch which serves very well as a fundus.

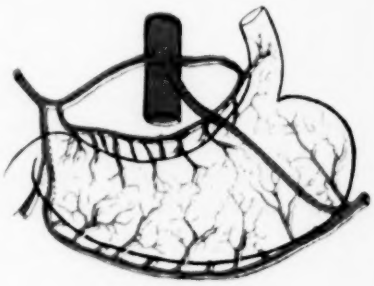
Adequate nutrition of the stump of the stomach can be maintained by the vessels which approach the stomach from the right. The vessels coming from the left can be ligated without danger of necrosis. With a stairway-like resection, a disease-free portion may be maintained along the greater curvature, and a tube-like stomach is available for anastomosis.

The major danger of resection in the past has been the insecurity of the anastomosis because of traction upon the suture by the smooth muscles of the esophagus and lack of serous envelope around the esophagus.

To assure adequate nutrition, the anastomosis is made in the posterior wall of the gastric stump. The upper portion of the stomach with the anastomosis is within the mediastinum, and the esophagus has a serous envelope. Fixation of the gastric stump to the mediastinal pleura prevents traction on the suture of the anastomosis. The stomach is also sutured to the diaphragm.

Postoperatively, the pleural cavity is continuously drained by suction.

The transthoracic approach suffices only for tumors of the esophagus. Tumors originating in the stomach require thoracoabdominal laparotomy. To open both cavities, two separate incisions may be used or the hook-like incision of Kirschner.



Vascular supply

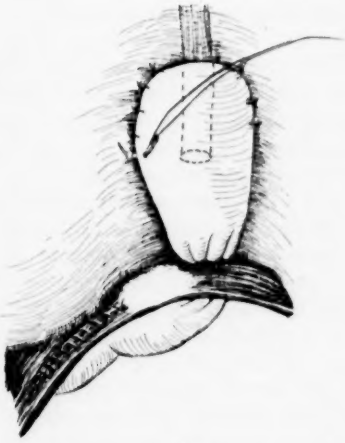
This operation was employed for 14 of 20 patients with carcinoma of the cardia. Ages were from 37 to 65 years. Of the 14 patients, 4 died between the third and fifth postoperative day, 2 from heart damage, 1 with bronchopneumonia, and 1 with atonia of the gastrointestinal tract. For no patient did the suture prove insufficient.

* Kardiaresektion des Magens. Deutsche med. Wchnschr. 76:389-390, 1951.

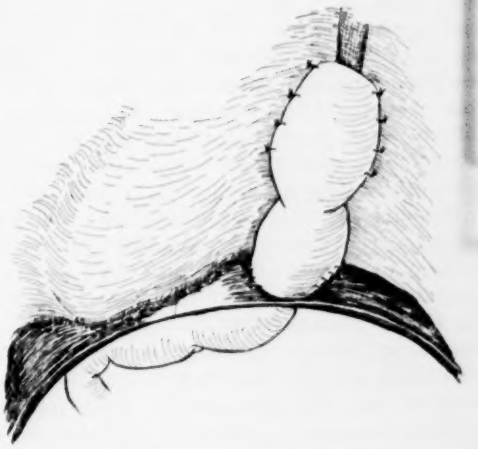
Creation of Intrathoracic Gastric Pouch

Line of resection

Gastric stump pulled into chest cavity and esophagus anastomosed to posterior wall



Fixed to mediastinum



Sewn to diaphragm

Surgery in Bleeding Peptic Ulcers

H. FINSTERER, M.D.*
Allgemeines Krankenhaus, Vienna

IMMEDIATE surgery is indicated for the first major hemorrhage of patients with chronic peptic ulcers. Operation should be performed after the patient reaches the best possible preoperative status, but no later than twenty-four to forty-eight hours.

In cases of sudden hemorrhage from a fresh peptic ulcer without preceding history of gastric discomfort, H. Finsterer, M.D., adopts an expectant attitude. If bleeding recurs, laparotomy is done to ascertain a possible silent chronic peptic ulcer which, if found, is removed.

Blood transfusions are of value not only to replace the circulating blood volume but also to increase coagulation by aiding the production of blood platelets. The hemostatic component, however, can be effective only with flat, bleeding ulcers or with erosive gastritis when the bleeding is caused by decreased clotting tendency. Bleeding from minor mucosal vessels at the margin of a callous ulcer is usually treated by conservative management with or without transfusion.

Hemorrhage caused by a bleeding major vessel at the bottom of a penetrating ulcer may be stopped by thrombus formation resulting from the fall in blood pressure incident to circulatory collapse. A large blood transfusion of over 1,000 cc., however, may dislodge the thrombus by the increase in blood pressure and promote further bleeding. Transfusion, nevertheless, is still indispensable as a method of blood substitution and as a preparatory measure for a later operation.

If bleeding recurs two to three days after transfusion, the most likely cause is dissolution of the thrombus by hyperacid gastric content undiluted by ingested food.

Chronic peptic ulcer is the most frequent source of acute hemorrhage. Even patients with cirrhosis may have concomitant ulcers and, if doubt exists, recurring hemorrhage warrants surgical investigation for peptic ulcer. If portal cirrhosis is found at laparotomy and the stomach and duodenum appear normal, gastrotomy and palpation with the ungloved finger should be done to detect an obscure flat ulcer.

Early operation has two objectives: [1] to avoid fatal bleeding; [2] to prevent perforation of the ulcer.

In addition to technic and type of procedure, probably the most important factors influencing outcome are the degree and the duration of anemia. Surgery should not be delayed until degeneration occurs.

For control of bleeding from flat ulcers accompanied by a spastic pylorus, gastroenterostomy may possibly enable the stomach to empty and contract adequately. However, this

* Surgical treatment in acute hemorrhages of peptic ulcers. J. Mt. Sinai Hosp. 17:377-392, 1951.

procedure is valueless with callous and penetrating ulcers, since the stomach does not contract and hemostasis will not result.

For bleeding from a duodenal ulcer which has penetrated into the pancreas and which is not safely resectable because of the location and extent, an exclusion of the pylorus is performed instead of the resection. The pylorus is excluded by ligature of the antrum with encircling sutures proximal to the pylorus, and a posterior gastroenterostomy is done. Then a large tampon is placed on top of the duodenum which bulges the abdominal wall.

A firm laparotomy dressing applied at the end of the operation presses the duodenum against the ulcer base and controls the bleeding. The dressing must be loosened after twenty-four hours to avoid injury to the pancreas.

The most popular procedure is the two-thirds gastrectomy with the Hofmeister-Finsterer anastomosis. When operation is delayed, results are poor. Mortality is often the result of parenchymatous degeneration from prolonged anemia. Patients with secondary anemia as a result of repeated and minor hemorrhages should be operated upon, and resection done.

Vein Stripping vs. Multiple Ligation for Varicosities

JAMES M. SULLIVAN, M.D., AND WALTER F. MERDINGER, M.D.*

SAPHENOUS stripping is decidedly better than multiple ligation for therapy of varicose veins because the numerous perforating branches are torn and thrombosed. Ligation does not thrombose every perforator along the vein's course.

This conclusion is reached by James M. Sullivan, M.D., and Walter F. Merdinger, M.D., of Marquette University, Milwaukee, and Veterans Administration Hospital, Wood, Wis., from a one-year postoperative comparative study of 174 patients, aged 20 to 74 years.

Vein stripping was used in 102 cases, multiple ligation in 72. In 60% of cases only one leg was involved—the left leg being affected in 35% of these. Of the 102 patients treated by vein stripping, 68 were free from pain, cramping, or sign of varicosities. Similar results were obtained in only 3 of the 72 who had multiple ligations. Small veins without pain or cramping remained in nearly one-fourth of the vein-stripping cases, and in about one-seventh of the others. Noticeable cramping or pain with remaining veins appeared in 2 of the 102, and in 36 of the 72; no benefit from the operation was attained in 4 and 23, respectively.

Postoperative pain, slightly greater with stripping, is easily controlled by analgesics. Cosmetic results are best with stripping.

* Vein stripping versus multiple ligations. Wisconsin M. J. 50:357-360, 1951.

Prognosis of Erythroblastosis Fetalis

BRUCE CHOWN, M.D.*
University of Manitoba, Winnipeg

In most cases, Rh-negative blood in a prospective mother is far less threatening to her children than generally realized.

A young woman not sensitized by transfusion can almost certainly have 1 and probably 2 healthy babies. Erythroblastosis fetalis cannot develop unless the fetus inherits an Rh-positive character from the father and the mother's serum contains anti-Rh antibodies.

About half of the Rh-positive men carry both a positive and a negative factor and hence can father Rh-negative children. Of 10,000 women examined during pregnancy, 1,500 will lack the Rh factor. Although 1,000 will be married to Rh-positive men, less than 100 will have anti-Rh antibodies, and the majority will give birth to normal or readily treatable babies.

To foretell the probable outcome in a given case, Bruce Chown, M.D., searches the previous record for evidence of Rh-sensitivity and determines the patient's anti-Rh titers throughout the current pregnancy.

Prognosis from history—Previous transfusions should be investigated, including the Rh factor in donors. If the patient has had a major operation, she may have received transfusions without her knowledge. Even if the mother has been sensitized, the first Rh-positive child may escape harm, though slight to fatal involvement is possible.

All pregnancies must be taken into account. Fairly early spontaneous abortions may affect the mother. Illegal operations are even more likely to cause sensitization, probably by spilling of fetal blood into the uterine cavity.

The strongest signs of erythroblastosis in a previous infant are severe jaundice within twenty-four hours after full-term birth, generalized, rapidly fatal edema, severe anemia at birth, or moderate to severe anemia in the first month.

Laboratory data or autopsy report of an earlier child may be significant. Erythroblastosis is almost certain if a macerated fetus has a small thymus, large spleen, and fatty cells in the adrenal cortex.

Anti-Rh antibodies may be demonstrated in fluid of skin blebs or pleural cavities, and blood tests may be done on placental clots as long as two or three weeks after fetal death.

The outlook for the first pregnancy with maternal sensitization is relatively good. Without a prior Rh-positive transfusion, fetal death is no more likely than in any normal gestation. Only 5% of babies born alive will be fatally ill; 25% will recover with large or small transfusions; 70% will need no therapy.

* Erythroblastosis fetalis. Notes on prognosis. Journal-Lancet 71:219-221, 1951.

The prospect worsens if a woman has been affected by transfusion or had 1 or more infants with erythroblastosis. About 40% of subsequent Rh-positive pregnancies result in fetal maceration. Of the survivors, 40% require treatment but at least 9 of 10 will live.

Prognosis from serology—Technicians differ in ability to evaluate maternal antibodies, and identical serum may register high titers in one laboratory and low in another. Therefore, a physician should rely on a single institution familiar with the tests. An experienced laboratory may draw the following conclusions:

• *Without a previous Rh-positive transfusion or erythroblastosis*

1] An antibody titer of 8 or less indicates good prognosis.

2] With 16 or more the outcome is doubtful, but not necessarily worse with higher levels.

3] If antibody rises from early pregnancy with the same strength in saline and in albumin, prognosis is nearly always good.

4] If antibody falls slowly and steadily throughout pregnancy, the fetus is Rh-negative. Status is not shown by constant values.

5] If levels climb rapidly in the last six weeks to two months, the baby may be ill but is generally saved.

• *With a previous Rh-positive transfusion or affected child*

Antibody is less prognostic, but abrupt rise late in gestation is a grave portent.

Prognosis and obstetric care—Even if the mother has anti-Rh antibodies, labor should not be induced before the thirty-eighth week. Delivery at or after this time is harmless, and early birth at least shortens the period of worry.

During labor, analgesics should be kept to a minimum, to prevent depression of the baby's respiratory center. Ordinary anesthesia is satisfactory in 95% of cases, but an anesthetic with high oxygen content may save a severely anemic infant.

¶ HABITUAL ABORTION and other complications of pregnancy may be averted by a concentrate of wheat-germ oil taken from the first prenatal visit until delivery, indicating that fetal loss may be nutritional in origin. The substance has hormonal activity equal to 10 units of estrogen per cubic centimeter and 5 μg. of testosterone per cubic centimeter, also luteinizing and follicle-stimulating elements. Wynne M. Silbernagel, M.D., and James B. Patterson, M.D., of White Cross Hospital, Columbus, prescribe 3-minim capsules, 1 to be swallowed before meals three times daily. At the first sign of abortion, premature labor, or toxemia, the dose is raised to 20 capsules a day; as trouble subsides, 1 capsule less is taken daily until the original dosage is reached. Threatened abortion was reduced from 16.6%, the rate for 1,973 obstetric patients without the concentrate, to 10% for 825 given the wheat germ. Incidence of abortion dropped from 15 to 3%, prematurity from 7.1 to 3.7%, toxemia from 10 to 2.1%, and stillbirths from 2.3 to 0.4%.

Ohio State M. J. 47:533-535, 1951.

Cow's Milk Allergy

NORMAN W. CLEIN, M.D.*
University of Washington, Seattle

APPROXIMATELY 1 of every 15 infants has some degree of allergy to cow's milk and will probably obtain complete relief if soybean milk is substituted.

Many baffling, serious, and apparently unrelated syndromes result from milk sensitivity. The symptoms depend on the tissue or organ concerned as well as on the effects of edema, smooth muscle spasm, and secretion of mucus on the tissue.

Many infants who take breast milk with no untoward effects will show allergy when given cow's milk formula. This allergy is apparently not transmitted through the mother's milk, even though she may be allergic to cow's milk. To prevent or decrease major allergy in later life, the allergic condition should be recognized and treated in babyhood.

In a study of 140 milk-sensitive infants, Norman W. Clein, M.D., noted that symptoms usually began at 2 to 4 weeks of age, when milk was still the child's only food. The diagnosis of milk allergy was established if the symptoms disappeared after complete removal of milk from the diet and the substitution of soybean milk and recurred when cow's milk was again added to the diet. In almost all cases, formulas had been changed and juggled repeatedly before soybean milk was tried.

The symptoms of cow's milk allergy, which often occurred simultaneously, may be described as follows:

Eczema was the most frequent symptom, appearing in 42% of cases. The rash usually was seen on the cheeks, forehead, and head.

Pylorospasm, present in 39% of patients, varied from persistent spitting up to serious projectile vomiting. Mucus was frequently found in the vomitus and showed pronounced eosinophilia.

Colic occurred in 29% of the babies and was usually severe, causing screaming, doubling up, and generalized discomfort not relieved by ordinary means.

Diarrhea was an annoying symptom in 24% of cases. Loose, watery, often curdled, yellow to green stools irritated and burned the skin and buttocks. Blood and eosinophil-containing mucus were passed.

Constant unhappiness was a characteristic of 20% of the infants.

Croup and cough, choking, gagging, and mucus, resembling symptoms of the classical chest cold but unresponsive to usual measures, appeared in 16% of cases. Repeated roentgenograms, bronchoscopies, and even treatment for thymic enlargement were done.

Nose colds had been present since birth in 8%.

Chronic constipation, asthma, ano-

* Cow's milk allergy in infants. Ann. Allergy 9:195-204, 1951.

rexia, paroxysmal sneezing, and *urticaria* were other allergic manifestations.

Allergic toxemia, the most serious symptom, occurred in 3 instances. The condition disappears immediately if milk is eliminated from the diet, but can cause death otherwise.

Many of the babies outgrow allergy to milk within three to four months and are then able to tolerate cow's milk, often without difficulty. After one year, 15% are still unable to tolerate cow's milk. Almost all these allergic infants will have symptoms of major allergy with increasing age. Milk is the most important food allergen.

Some infants with slight milk sensitivity continue to do fairly well if the milk is boiled, since prolonged heating lowers the antigenicity of milk and other foods. Infants sensitive to cow's milk are usually allergic to goat's milk also.

Soybean milk, aided by vitamin supplements, will provide healthy growth and development. High in unsaturated fatty acids, soybean milk supplies essential nutritional values of protein, fat, carbohydrates, and minerals. No animal protein is present: the milk is reasonable in cost and easy to obtain and prepare. Loose stools resulting from soybean milk feedings can be controlled by adding 1 tsp. of Kaopectate to each bottle.

Sinobronchitis Therapy of Children

WALTER C. PRICE, M.D., AND VERONICA B. BINNS, M.D.*

THE antihistamines are logical adjuvants to antibiotics in the treatment of children with sinobronchitis. Obstruction by hyperplastic nasal mucosa prevents effective clearing of pus-filled sinuses. Thus, therapy that combines mucosa shrinking with antiallergic and antibiotic effects is highly efficacious.

Walter C. Price, M.D., of Harvard University, Boston, and Veronica B. Binns, M.D., of the University of Pittsburgh compared results in treatment of 54 children with sinobronchitis. Parenteral penicillin and oral antihistamines were administered to 16 patients. The next 18 received aerosol penicillin in addition. The last 20 were given all the foregoing therapy and Paredrine-penicillin nose drops as well. Therapy usually lasted a week. The best results were obtained by the children given the final combination.

Suitable penicillin dosage is one intramuscular injection of 300,000 units of procaine penicillin daily and 50,000 to 100,000 units of aerosol penicillin four times daily. The aerosol is given immediately after the Paredrine-penicillin nose drops. Syrup of Histadyl in a 15- to 30-mg. dose is taken four times daily.

* A treatment program for chronic childhood sinobronchitis. J. Pediat. 38:597-601, 1951.

Childhood Conditions Not Requiring Therapy

ISRAEL GORDON, M.D.*
Ilford, England

MANY parents suffer needless anxiety and spend money unnecessarily on the treatment of innocuous conditions and minor imperfections in children.

Health should not be regarded as some abstract ideal of perfection; the child who feels well and functions well *is* well, minor deviations notwithstanding. In this regard, probably the most difficult question the pediatrician has to answer is: "Does this condition require treatment?"

COMMON CONDITIONS

Five conditions stand out preeminently in importance, either by reason of the effort needlessly expended for their correction or by the effect that such treatment has on the later career of the individual:

Enlarged tonsils—Unless the tonsils are so large as to cause obstruction, appearance should never be the sole criterion for operation. Too many tonsillectomies are performed, and inadequate or careless surgery is frequent.

Orthopedic defects—The legs of small children are not straight. In the first two years of life a varoid phase exists with outward curve and inward twist of the lower end of the leg. At about 2 years the knee becomes valgus; this "deformity" is usually most pronounced at 4½ and disappears by the age of 6.

Phimosis—Operations in the early months of life to prevent phimosis have no scientific basis, since the occurrence of the condition in later life cannot then be predicted.

Constipation of breast-fed babies—Infrequent stools are entirely normal for breast-fed infants. In the third, fourth, and fifth months of life, 41% of such babies do not have daily stools. Use of laxatives or enemas to force daily bowel movements may cause chronic constipation later.

Innocuous cardiac murmurs—Most systolic murmurs in the heart are harmless, and undue attention leads to neurosis.

ALIMENTARY CANAL

Teeth may come through at any time from birth on, often preceded by gum bleeding. The gums should not be incised for this condition.

Infants may keep the tongue protruded, sometimes to one side, or in motion. Geographic or strawberry tongue does not necessarily indicate scarlet fever. Tongue tie is almost always imaginary and incision of the frenum is not necessary.

Umbilical hernias are so common in babies that small protrusions need not be regarded as pathologic. Occasional streaks of blood in stools are no cause for alarm. Threadworm infestation is almost universal, usu-

* The healthy child: its many disguises. Brit. M. J. 4707:611-614, 1951.

ally symptomless, and scarcely deserves to be called a disease.

A contented, healthy baby may regurgitate milk. Curdling of the milk merely means that the food has entered the stomach.

OTHER INNOCUOUS CONDITIONS

Skin—Nevi often cause concern to parents. The faint port wine stains on the bridge of the nose and nape of the neck in infancy are normal. The strawberry nevus disappears spontaneously.

Small, pearly-white, miliary sebaceous cysts found on the face and nose and occasionally elsewhere in 40% of healthy babies also disappear and are probably due to closure of hyperactive sebaceous glands by epidermis in the fetus.

The less common red papular eruption on the face is also harmless. A bald patch on the occiput is common and soon vanishes. The milk crust, a collection of oils and dirt over the anterior fontanel, can be removed with soap and water.

Mucous membranes—Little relationship exists between the color of the mucous membranes and the hemoglobin values.

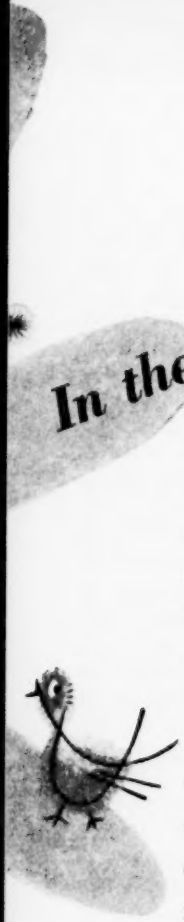
Ears—Plastic surgery is rarely required for protruding ears, and strapping is useless.

Bones, joints, and muscles—Many infants hold their heads to one side, but this position is normally righted without treatment. Asymmetry of face and cranium is very common and usually is not noticeable later. Cracking joints are normal. Divarication of the recti in infants is of small moment. Growing pains require investigation but are probably caused by minor orthopedic deformities and are almost always innocuous.

Nervous system—The neurologic field is the most difficult in which to answer the question: "Does this condition require treatment?" Israel Gordon, M.D., feels that in the following examples the answer is usually "No": common tics, such as blinking; nocturnal enuresis in children under 5; variations from the average in the amount of sleep required; night terrors in small children; the head-banger and the breath-holder; morning sickness in the child who is afraid of school; and nail-biting—19% of school children bite the nails. In any of these cases, careful study should be made of the child's general reaction to stress.

¶ TERRAMYCIN FOR GRANULOMA INGUINALE promptly eliminates Donovan bodies within four or five days and hastens healing. Of 32 patients given terramycin orally, 24 were free of lesions at the end of treatment or shortly thereafter. Lesions of the other 8 were healing when last seen, assert Robert B. Greenblatt, M.D., and associates of the Medical College of Georgia, Augusta. Total dosage ranged from 20 to 87.5 gm. Ordinarily, 2 gm. daily for twelve and one-half days is adequate, although patients with extensive disease may require larger amounts or re-treatment.

J. Ven. Dis. Inform. 32:113-115, 1951.



In the "bad old summertime"

The expression *Cholera infantum* is with the yesteryears —but fermentative diarrhea is with us still, especially in the "bad old summertime." For the successful management of this syndrome, many physicians rely on Dryco. Because of its low-fat and low-carbohydrate to high-protein ratio, Dryco is well adapted to the impaired digestive capacity of the infant . . . the fine, flocculent curd is readily digested. Dryco is enriched with vitamin A and vitamin D. Only vitamin C need be added in the diet. For the very next case of summer diarrhea you encounter, prescribe Dryco. Dryco is frequently used for supplemental feeding. Each tablespoonful will supply 31½ calories. Dryco is readily reconstituted in cold or warm water. Available at pharmacies in 1 and 2½ lb. cans. Professional literature and samples are available.

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Hormonal Therapy in Advanced Breast Cancer

IRA T. NATHANSON, M.D.*
Harvard University, Boston

ESTABLISHED surgical and radiation technics, when feasible, should be used if cure or palliative control of carcinoma of the breast seems possible. When the disease is beyond the realm of these procedures, hormonal treatment has great value though the effects are temporary and usually of short duration, explains Ira T. Nathanson, M.D.

Androgens may be used as palliative therapy for advanced breast cancer at any age and seem to exert greatest benefit in cases with osseous metastases. The hormone is usually given intramuscularly as testosterone propionate in oil or testosterone in suspension, 50 to 100 mg. three times weekly. After such therapy, osteolytic lesions calcify in from one-fifth to one-fourth of cases.

Subjective and objective improvement are not coeval since the disease may progress or accelerate in spite of excellent symptomatic relief. Recrudescence of signs and symptoms usually appears within a year, so castration is generally more efficacious in premenopausal women.

Estrogens are used primarily for advanced primary breast cancer and distant metastases of postmenopausal women, regardless of age, although best results are with elderly patients. Therapy usually consists of diethylstilbestrol in oral dosages of 10 to 15 mg. daily.

The most obvious effects are on the soft-tissue lesions of breast cancer, in which benefit is usually more apparent than with androgen therapy. Ulcerations may heal and gross mass, lymph nodes, and pulmonary and hepatic metastases diminish. Slowly growing tumors are the ones most rapidly and satisfactorily controlled by estrogen therapy.

Osseous lesions of postmenopausal women usually calcify as often as with androgen therapy for women of any period of life. Subjective and systemic effects are similar to those with androgen treatment, but are not as frequent or as rapid, and the discrepancy between the subjective and objective response is less.

The disease may be accelerated by use of estrogens for premenopausal women.

Castration is primarily of value as a palliative procedure for premenopausal women, though occasionally beneficial a few years after spontaneous cessation of menses if residual ovarian tissue is active. The effects are of limited duration. Primary, lymphatic, and other soft-tissue lesions of female breast cancer may recede after castration and osseous lesions may calcify. Physical status improves, pain is relieved, and appetite and weight usually are increased with or without obvious local effect.

* Sex hormones and castration in advanced breast cancer. Radiology 56:535-552, 1951.

Ovariectomy is the most rapid and sure method but surgery is often inadvisable. When irradiation is used for castration, dosage must be sufficient to suppress ovarian function permanently; the effective dose level is high for young women.

For men, orchiectomy is more effective than irradiation in obliteration of testicular activity, even in older individuals, and reactions in the sensitive scrotum are avoided. Initial orchiectomy is more efficacious than estrogens for advanced breast cancer in men.

Since the first effects of hormonal therapy or castration usually appear within three months, adequate trial should be given before changing the method. Treatment may be maintained at a constant level as long as the growth shrinks, then either discontinued within a few months after the disease is apparently stationary or continued with the same or lesser amounts even after the disease seems inactive. The condition will eventually reactivate.

Estrogens and androgens given simultaneously probably are no more effective than either hormone alone or castration. However, when one of the hormones is no longer effective after an initially favorable response, further benefit is sometimes obtained by using the other hormone or even by discontinuing hormonal therapy.

Systemic effects common to estrogens and androgens are nausea and vomiting, edema, and hypercalcemia. Adjustment of the dose or cessation of the hormone, with treatment of specific symptoms, will control the effect.

Uterine bleeding, during and particularly after withdrawal of therapy, and urinary disturbances are undesirable reactions arising solely from estrogens. Bleeding usually abates with cessation of therapy and conservative management.

The side-effects specifically related to androgen therapy are hirsutism, acne, facial flush, hoarseness, and increased libido.

Combinations of therapy often increase life expectancy. Many lesions originally judged unsuitable for operative procedures may become susceptible to palliative surgery if regressions are significant after hormonal therapy or castration. Estrogens apparently increase the radiosensitivity of breast cancer in early phases of therapy, possibly by augmenting vascularity.

Estrogen therapy of recurrences within an area of previous and initially effective radiation is ordinarily not as efficacious as for similar untreated lesions, although recurrences immediately beyond the field of irradiation respond the same as an untreated lesion. Radiation of reactivated areas that had regressed excellently with estrogen therapy must be given with the same caution as if the areas had been previously irradiated, since late changes in the tumor bed are similar.

Pain is alleviated and metastatic osteolytic reactivated lesions calcify if radiation therapy is given to growths initially suppressed by hormonal therapy. Hormonal therapy or castration may also favorably influence osseous metastases resistant or recrudescent after preliminary radiation.

Transurethral Prostatic Resection

ROGER W. BARNES, M.D.*

College of Medical Evangelists, Los Angeles

DEFINITE sequence of maneuvers with rhythm and coordination of movements is necessary to remove satisfactorily and rapidly the large prostate gland by transurethral resection.

Roger W. Barnes, M.D., prefers a resection beginning at the dorsal portion of the bladder neck because of the easily identifiable landmarks—the trigone and ureteral orifices in the bladder and the verumontanum in the urethra.

Starting dorsally, any intravesical middle lobe is removed first. The loop is placed over the most prominent edge of the projecting prostatic border, and a short excursion is made. The resectoscope is then rotated slightly, the inner end is moved to a little more lateral position, and the second piece is removed just lateral to the first, not deeper.

The routine is repeated until the lateral edge is reached, when a second, deeper row is started. The procedure is continued back and forth until bladder neck fibers are exposed and all the middle lobe has been removed. Bleeders at the exposed bladder neck are then fulgurated.

Starting at the 6 o'clock position on the intravesical portion of the larger lateral lobe, similar maneuvers are carried out until consecutive pieces are removed to the 12 o'clock position. A slightly deeper row is started and repeated until the entire intravesical portion is resected, the bladder neck fibers are exposed, and any bleeding is stopped. To maintain orientation, the resectoscope should be kept in the same relative in-and-out position during the removal of pieces in one row.

After the intravesical portion on one side is removed, the resectoscope is drawn into the prostatic urethra and the verumontanum identified. The intraurethral lateral lobe of the side is then removed in the same manner. The other lateral lobe is resected similarly.

Three excursions of the loop may be necessary to encompass the entire length of the prostate if the urethra is long. The advantage of removing both the intravesical and intraurethral portions on the same side before starting on the other is that the bleeding at the outer edge of the intravesical portion does not have to be controlled immediately, for the tissue is soon resected again when the intraurethral segment is removed.

Besides logical sequence, the surgeon must use coordination and rhythm in excursions of the loop. The eye must be kept on the ocular piece whenever tissue is resected and the loop is pressed against the tissue to be removed by swinging the ocular end in the opposite direction. The inner end is depressed with leverage

* Method of rhythm in transurethral prostatic resection. J. Urol. 65:603-607, 1951.

pressure of the left fingers as the left thumb elevates the ocular end to engage a deeper bite. The foot switch is depressed the instant the loop touches the tissue and is released exactly when the loop enters the sheath at the end of the excursion. After the excursion is completed, the inner end is swung away from the tissue to allow the last piece removed to be washed into the bladder and to prevent the loop from impinging on unresected tissue.

Proper control of water inflow is important. Water inflow is not needed during actual resection of a bit of tissue, since the loop is buried in the tissue and the piece is too close to the lens for visualization. The water is shut off the instant the loop is in place for removal of a piece and is turned on again when visualization is necessary to position the loop for the next piece.

If water inflow is cut down or turned off when clear visualization is not necessary, the bladder does not fill rapidly and valuable time is not lost in frequent emptying. Such control should be carefully coordinated with the action of the footswitch, with the excursion of the loop, with the rhythmic swing into and away from the tissue, and with the eye against the ocular end of the lens.

Occult Prostatic Carcinoma

REED M. NESBIT, M.D., AND WILLIAM C. BAUM, M.D.*

If malignant growth is unexpectedly found in tissue removed from an enlarged prostate, therapy should probably be conservative.

Most patients are already fairly old, and such cancers seldom spread rapidly. Unsuspected cancers are discovered post mortem in surprising numbers, considering the proportion encountered in treatment of prostatism.

On reviewing 42 cases of occult prostatic carcinoma, Reed M. Nesbit, M.D., and William C. Baum, M.D., of the University of Michigan, Ann Arbor, found that only 2 deaths had resulted from neoplasm, one eighteen months and the other fourteen years after diagnosis. Up to sixteen years after the revealing operation, all living subjects were free of suspicious symptoms; 14 had died of unrelated causes, having remained free of cancer symptoms.

Endocrine therapy is almost as effective as radical perineal procedures. When stilbestrol is administered and orchiectomy done, more than a third of the patients can be expected to live five years or more.

Radical perineal surgery is done routinely for the early palpable growth limited to a small area within the capsule.

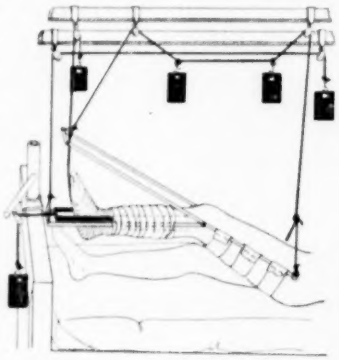
* Management of occult prostatic carcinoma. J. Urol. 65:890-894, 1951.

Traction and Suspension for Fractures

FREDERICK M. SMITH, M.D.*
Columbia University, New York City

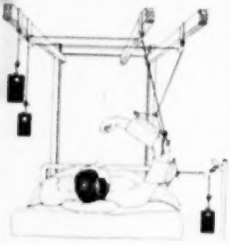
TREATMENT of a fracture should provide rest for the injured bone and opportunity for movement of the surrounding soft parts.

This is often best accomplished by intelligent use of traction or suspension, or both. Frederick M. Smith, M.D., believes that many of the difficulties with these procedures result from lack of understanding of what each type of treatment can and cannot accomplish.



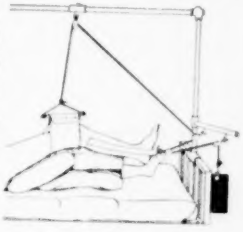
Traction and suspension, although often used together, may be employed independently. Suspension is frequently used to facilitate traction or to permit freer motion.

For oblique or otherwise unstable fractures of long bones, especially in the lower extremities, where powerful muscles tend to produce overriding of the fragments, a constant traction will overcome or will neutralize the muscle recoil. The amount of weight required will vary with the bone injured, the power of the opposing muscles, and, chiefly, the time elapsed since injury.



Overriding femoral shaft fragments in a strong man may require only 20 to 25 lb. of skeletal traction if applied within eight hours after injury. If a day has elapsed, 35 to 40 lb. may be needed. Therapy of a similar fracture in a 4-year-old may need 8 to 10 lb. of skin traction.

Because of the extensive infiltration of the muscles and other soft parts with extravasated blood and fluid exudate, the muscles eventually become almost completely inelastic and resistant to elongation by traction force. The goal of traction treatment is to regain the normal length of fragments in the first eight to twelve hours, and then to maintain this length. Traction starting with 10 lb. and with 5 lb. added every six hours



* Traction and suspension in the treatment of fractures. S. Clin. North America 31:545-560, 1951.

is inadequate to reduce an overriding adult femur, since a pull of 20 lb. of traction is not exerted until nearly eighteen hours have passed. The same 20 lb. applied within the first two to four hours might well restore proper length.

Failure to restore length of bone within twelve hours is the result of using the wrong type of traction or insufficient weight. Once length has been restored, weight may be gradually reduced over a period of a day or two to an amount sufficient for maintenance.

TYPES

The type of traction to be instituted, whether gravity on the limb or skin or skeletal traction, should be carefully planned.

If little traction is required, adhesive straps applied to the skin are adequate. Skin traction must be applied with care, especially for elderly patients, and bandaged in place smoothly to prevent skin excoriation. Moleskin plaster or flannel strips applied with Ace adherent are preferable to ordinary zinc oxide adhesive plaster. The upper end of skin straps should be placed 2 to 3 in. above the fracture site and left exposed so that they can be watched for slippage. A spreader should be used to keep adhesive straps from pressing on bony prominences. No more than 10 lb. of skin traction should be used in any one area, and, because of skin excoriation, should not be continued more than forty-eight hours if operation is contemplated.

When reduction is required for a prolonged period or needs considerable weight, skeletal traction is more efficient and comfortable. The great risk of pin or wire traction is infection, and therefore insertion should be undertaken only as a surgical operation with strict aseptic technic. Pins or wires should always be introduced at a right angle to the axis of the shaft and to the line of traction to prevent lateral slipping, which may carry skin bacteria into the deeper tissues and cause infection.

Skeletal traction may be done by the use of: [1] rigid Steinman pins drilled through the bone and with traction applied by means of a yoke, [2] tongs driven into the bone, or [3] Kirschner wires, which are of much smaller caliber, flexible, and require a spreader yoke to make them taut.

If local anesthesia is used for introducing the pin, the periosteum and skin must be well infiltrated. The pin or wire has a diamond-shaped cutting point to drill a path, but neither should be drilled with too great rapidity and pressure, for sufficient heat may be created by friction to burn the bone and create necrosis.

The wise surgeon becomes adept with one or two types of pins or wires rather than having several on hand and never learning to use any of them properly. Steinman pins should be made of one piece of steel; pins that unscrew in the middle are weak and dangerous and often break.

ADVANTAGES AND DISADVANTAGES

As emergency treatment, traction lessens damage, pain, and shock; makes plaster casts unnecessary; permits

early joint motion; allows free access to wounds and early application of physiotherapy; and permits subsequent manipulation of the fracture fragments or open reduction and internal fixation.

Disadvantages are that transportation is difficult; bed rest is required which may lead to complications in aged patients; more careful daily supervision is needed than with plaster immobilization; and overpull may cause delayed union or nonunion. Skin traction may make the skin unsuitable for open operation for two to three weeks.

Ulnar Fracture with Posterior Radial Dislocation

J. H. PENROSE, M.D.*

MONTEGGIA fracture with posterior displacement of the radial head should be repaired by internal fixation of the ulna and excision of the whole head or its detached segment.

Reduction is better and subsequent range of motion wider than after the usual immobilization in plaster. J. H. Penrose, M.D., of Coventry, England, employed both methods and compared results in 7 cases involving middle-aged adults.

The ulna commonly fractures about 1 in. distal to the coronoid process, and a triangular or quadrilateral fragment is displaced anteriorly with several smaller pieces. Posterior angulation occurs at the fracture, and the distal fragment is shifted toward the radius.

The radial head is usually broken along the anterior margin, dislocated posteriorly, and in some cases fractured through the neck. The annular ligament is ruptured or avulsed with its bony attachment.

The joint is exposed through a posterolateral incision. If the displaced radial segment is small and the rest of the joint undamaged, the segment alone is removed; otherwise the entire head is excised. The dislocation is reduced and the joint closed.

The skin incision is extended along the subcutaneous border of the ulna. The upper fragment is usually fixed by an intramedullary wire or nail, and the smaller pieces are held in place by one or two loops of stainless steel wire.

If fixation is rigid a cast is unnecessary, and active movements can be started as soon as the wound heals.

Results may be satisfactory even if ulnar reduction is imperfect but seem to be a little better in cases in which the entire radial head has been removed. Flexion, extension, and supination may be slightly limited.

* The Monteggia fracture with posterior dislocation of the radial head. J. Bone & Joint Surg. 33-B:65-73, 1951.

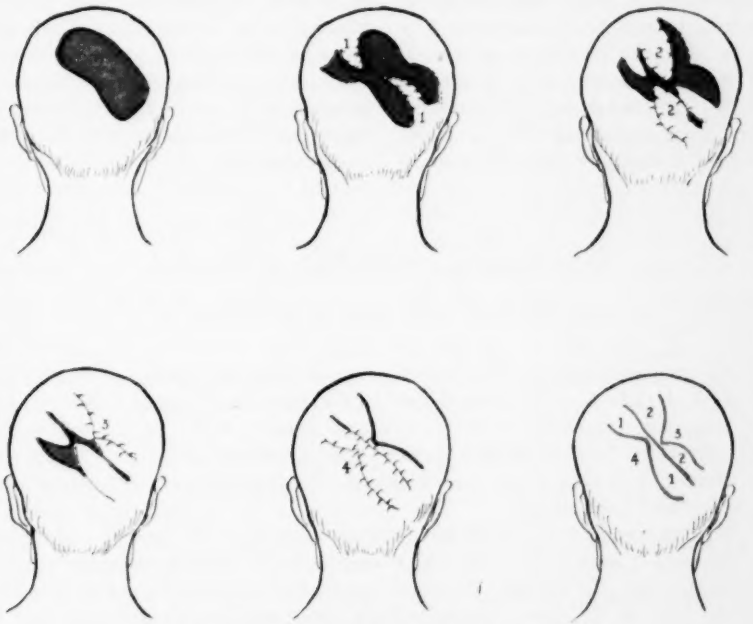
Repair of Scalp Defects

KERWIN M. MARCKS, M.D., ALLAN E. TREVASKIS, M.D.,
AND THOMAS J. NAUSS, M.D.*
Allentown General Hospital, Pa.

EXTENSIVE deformity can result if scalp injury is mistreated.

Traumatic avulsions and burns require primary repair. Angiomas and carcinomas of the scalp should be completely excised. Secondary repairs for all defects are made, if possible, with adjacent hair-bearing skin. Any ulceration or scar tissue is partially excised and covered by Z-plasty and advancement of adjacent flaps, the procedure being repeated until the entire area is covered (see illustration). Defects left by shift of the skin flaps are immediately repaired with split grafts.

With traumatic avulsions the important factors are to control hemorrhage, treat shock, and apply skin grafts early, explain Kerwin M. Marcks, M.D., Allan E. Trevaskis, M.D., and Thomas J. Nauss, M.D.



Secondary repair with multiple Z-plastys

* Scalp defects and their repair. Plast. & Reconstruct. Surg. 7:237-243, 1951.

The scalp is prepared with saline compresses before grafting, and the entire defect is covered in a single operative procedure. Blood transfusions and high-protein diet may be needed.

Scalp burns are treated as burns on any other part of the body. Early shaving facilitates therapy and split grafts are important to prevent infection and to cover the open wound as quickly as possible. If the periosteum and even outer table of the skull are involved, excision of the outer table will be better than drilling holes. Complete debridement of all necrotic bone must be done before grafting. If available, a flap can be used for covering; otherwise, the wound may be left to granulate and split grafts are applied early.

Angiomas are completely excised, bleeding vessels are ligated, and an initial covering is provided by primary suture, rotating flaps, or a split graft and, later, rotated hair-bearing flaps.

Biopsy should not be made of carcinoma of the scalp, but the growth should be excised completely, including a portion of apparently healthy skin. A split graft is applied so that recurrence may be easily visualized. If no recurrence appears within a reasonable period of time, the graft is partially excised and hair-bearing scalp is transposed.

If the cancer involves the periosteum and skull, the affected structures must be removed and a hair-bearing flap immediately applied. Because of the scalp's excellent vascularity, a sliding flap or adjacent rotating flap need not be delayed. However, a broad pedicle must be maintained.

Hypertension in the Elderly Patient

STEPHEN M. KRANE AND GEORGE A. PERERA, M.D.*

An elevation of arterial blood pressure first appearing after the sixth decade is probably unrelated to hypertensive vascular disease.

Stephen M. Krane, and George A. Perera, M.D., of Columbia University, New York City, believe that hypertension in the elderly patient is caused by an independent vascular degenerative process associated with aging.

True essential hypertension appears during youth or early adult life and is associated with a high incidence of renal arteriosclerosis. In contrast, the kidneys of people who first have hypertension after the age of 55 show approximately the same degree of vascular damage as the kidneys of elderly people with normal blood pressure. Recently developed hypertension in an elderly person is not severe. Most patients thus affected have a normal life span and die of causes unrelated to hypertension.

* Hypertension in older age groups. Ann. Int. Med. 34:1017-1024, 1951.

Medical Forum

Discussion of articles published in MODERN MEDICINE *is always welcome. Address all communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

Refrigeration Therapy for Chronic Osteomyelitis*

Comment invited from
Joseph Buchman, M.D.
Frederick M. Allen, M.D.

► TO THE EDITORS: The merits of refrigeration treatment for chronic osteomyelitis as propounded by Dr. Robert Bingham seem to be based upon several misconceptions.

In view of the general belief that penicillin effectiveness is greatest during the stage of bacterial multiplication and least during the mature and resting stages, one may question the idea that low temperatures inhibit bacterial multiplication and enhance the effects of penicillin.

There is no indication that the refrigeration as applied by the author affects more than the superficial layers of tissue. Generally, the use of a tourniquet is essential to refrigerate the deep parts. The mere application of one or two layers of moist toweling with crushed ice over the towel is not apt to produce any change in the temperature of an underlying bone in the presence of an uncontrolled circulation. Furthermore, if refrigeration is capable of suppressing the metabolism of the offending microorganisms, it is similarly capable of suppressing the defensive and reparative mechanisms brought into play. Refrigeration is not selective and therefore cannot be expected to suppress the activity of the bacterial cell and, at the same time, stimulate the activity of the host cells to hasten healing.

Considerable literature is available to show that the nature of the chronic osteomyelitic lesion is such that the likelihod of obviating surgical procedures is minimal, notwithstanding use of antibiotics, because the walling-off prohibits delivery of the antibiotic into the focus.

Proper surgical therapy under antibiotic control with primary closure of the operative wound is now known to be effective in a very high proportion of cases, and the addition of cryotherapy is not apt to improve the results.

JOSEPH BUCHMAN, M.D.
New York City

► TO THE EDITORS: Experiments by Brooks and Duncan gave results which could have been anticipated, namely, that small superficial infections were briefly inhibited by cold but that, subsequently, the lesions were somewhat larger than in untreated animals. These findings per-

*MODERN MEDICINE, May 1, 1951, p. 92.

tain to radical chilling with ice and to small infections for which the normal healing processes are efficient.

Radical chilling is for inhibition, not cure. It can preserve devitalized parts for a considerable time. Also it may save lives by minimizing bacterial activity and toxic absorption in acute fulminating conditions such as infected gangrene, gas gangrene, or burns, for one to several days, after which the temperature is gradually raised. Deep structures such as bones are not reduced to anywhere near ice temperature unless circulation is stopped, as with a tourniquet.

The milder hypothermia can be tolerated almost indefinitely, for weeks if necessary, and still aids in reducing both pain and bacterial activity. The humoral and other bodily defenses can be mobilized without hindrance; local healing can occur more slowly but often more surely.

I have not yet found an opportunity, which I have sought for several years, to try this method in tuberculosis of bones and joints. A sufficient number of qualified observers have furnished positive proof of benefits in a variety of surgical conditions. Adverse reports are usually attributable to unsuitable case selection or to haphazard methods of persons who may have high surgical qualifications but little or no experience with refrigeration.

Refrigeration will gain its proper place in the way recognized for every other surgical procedure—not by wholesale advocacy or rejection but by case selection and technic, as illustrated in Dr. Bingham's paper.

FREDERICK M. ALLEN, M.D.
New York City

Aspiration Therapy of Perforated Ulcers*

Comment invited from
S. Allen Wilkinson, M.D.
Donald C. Collins, M.D.

► TO THE EDITORS: It has long been known, as Dr. Hermon Taylor indicates, that perforations of the stomach or duodenum, the result of a peptic ulcer, usually heal spontaneously. Most practitioners have seen patients with a history of unquestionable perforation who recovered normally without operation.

If the perforation is small, the gastric acid high, and the gastric contents therefore presumably sterile, an infectious peritonitis is not apt to occur and the peritoneal irritation is primarily chemical. This combination of a small perforation and high acid occurs chiefly in young people, just the group who do the best on conservative management.

In the case of older people with lower gastric acid, larger perforations, and greater soilage of the peritoneum, we believe at the Lahey Clinic that immediate operation offers the safest means of saving the patient and certainly offers less risk of a fatality—the result of continuous leakage.

On the other hand, the younger patient who has perforated also offers very little risk from an operative standpoint. With operation, the size of the perforation can be seen and the risk of its failure to close spontaneously can be eliminated. For that reason, we still prefer and use operation in all cases of perforation. We believe that we increase the

*MODERN MEDICINE, May 15, 1951, p. 94.

patient's chances of a safe recovery and do not risk producing increased infection, necessitating a last minute attempt by operative intervention to control a spreading, and possibly fatal, peritonitis.

S. ALLEN WILKINSON, M.D.

Boston

► TO THE EDITORS: In the past five years, several articles have appeared suggesting that perforated gastroduodenal ulcers might be better treated routinely by conservative nonsurgical methods instead of by the present accepted practice of immediate surgical closure of the perforation. Dr.

Table 1. Nonoperative Therapy of Perforated Gastroduodenal Ulcer

Author	*Year*	*Cases*	*Mortality*		*Posttreatment Morbidity*	
			Died	*%*	*Cases*	*Secondary operation*
Wangensteen *Ann. Surg.* 132:1075-1085, 1950.	1935	12	1	8.3	0	0
Bedford-Turner *Brit. M. J.* 2:941-944, 1946.	1915	6	0		0	0
Taylor *Lancet* 251:441-444, 1946.	1946	28	4	14.3	4	0
Visick *Brit. M. J.* 2:941-944, 1946.	1946	14	3	21.4	2	1
Baritell *Surgery* 21:24-33, 1947.	1947	6	1	16.7	1	0
Birks *Ann. Surg.* 132:1075-1085, 1950.	1947	9	0		0	0
McClintock *J. Michigan M. Soc.* 46:1282-1285, 1947.	1947	35	1	2.9	1	0
		1	0		0	0
Bingham* *Canad. M. A. J.* 58:1-5, 1948.	1948	5	0		0	0
Cohn & Mathewson *California Med.* 69:351-356, 1948.	1948	25	15	60.0	?	?
Seeley et al.* *Bull. U.S. Army M. Dept.* 9:124-126, 1949.	1949	34	0		?	?
Bertram* *Ann. Surg.* 132:1075-1085, 1950.	1950	16	0		1	1
Total: 11 authors	1935-50	191	25	11.6	9	2

* Duodenal ulcers only.

Hermon Taylor is generally credited with popularizing this revived conservative medical method of treating perforated peptic ulcers. His article in 1946 (*Lancet* 251:441-444, 1946) received world-wide recognition and was abstracted by medical journals everywhere. Considerable debate then arose among physicians throughout the world as to the merits of conservatism in the treatment of perforated ulcer.

Modern Medicine led the way in the United States by publishing a Medical Forum discussion upon this extremely controversial question (Apr. 1, 1947, p. 37).

Medical and surgical opinions were obtained from recognized American authorities. The opinion of the majority of leaders questioned at that time was against the acceptance of conservative medical measures as a method of treating perforating gastroduodenal ulcers. Other editorials have also stated that this method is not a safer means of treatment.

Table 2. Operative Mortality in Perforated Gastroduodenal Ulcer

Author	*Years Covered in Report*	*Cases*	*Gross Operative Mortality*	
			Cases	%
Tilton *Gastroenterol. Rev.* 17:568-576, 1950.	1936	52	1	2.0
Tullis *Am. J. Surg.* 78:490-495, 1949.	1938-47	35	1	2.9
Niemeier *Canad. M. A. J.* 61:250-254, 1949.	1940-46	113	9	7.9
Cohn & Mathewson *California Med.* 69:351-356, 1948.	1942-47	265	17	6.4
Baritell *Surgery* 21:24-33, 1947.	1943-46	88	1	1.1
McElhinney *Surg., Gynec. & Obst.* 91:244-246, 1950.	1945-49	122	5	4.1
Jones, Parsons & White *Brit. M. J.* 1:211-215, 1950.	1947-49	106	4	3.8
Shedd & Schwartz *Gastroenterol. Rev.* 17:568-576, 1950.	1947-49	142	6	4.2
Strang & Spencer *Brit. M. J.* 1:873-876, 1950.	1948-49	189	2	1.1
Collins (personal cases)	1935-51	89	3	3.4
Total (10 authors)	1935-51	1,201	49	4.1

Enough time has now elapsed to allow evaluation of nonoperative medical methods in the treatment of perforated peptic ulcer. Tables 1 and 2 are self-explanatory and leave little doubt in the unbiased mind that immediate surgical closure of a perforated gastroduodenal ulcer is still the best and safest method of treating these acute lesions.

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Los Angeles

NEW THERAPY FOR OPHTHALMIC INFECTIONS

Furacin Ophthalmic preparations are especially valuable in external ophthalmic infections of bacterial origin: conjunctivitis, blepharitis—

because of stability at body temperature and their wide antibacterial spectrum.

Prophylactically they are indicated following chalazion operations, removal of foreign bodies and in corneal trauma and burns.

Literature on request

Reasons for the clinical effectiveness of Furacin include: a wide antibacterial spectrum, including many gram-negative and gram-positive organisms—effectiveness in the presence of wound exudates—lack of cytotoxicity: no interference with healing or phagocytosis—water-miscible vehicles which dissolve in exudates—low incidence of sensitization—stability.

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The NITROFURANS
O N O R
A unique class of antimicrobials

Diagnostix

Here are diagnostic challenges presented as they confront the consultant from the first clue to the pathologic report. Diagnosis from the Clue requires unusual acumen and luck; from Part II, perspicacity; from Part III, discernment.

Case MM-196

THE CLUE

ATTENDING M.D: I would like you to see a 34-year-old man who was admitted two days ago because of left renal colic. The pain was quite severe, and the stone was passed spontaneously. A small amount of blood was found in the urine and the initial picture was quite typical. However, he also has moderate lethargy and complains of weakness and fatigue. A complete physical examination and chest roentgenogram showed nothing abnormal, and we are at a loss to explain his symptoms.

VISITING M.D: What was the blood calcium and phosphorus?

ATTENDING M.D: Blood calcium was 10.2 mg. per cent and inorganic phosphorus was 3 mg. per cent—both of which values are within normal limits.

PART II

VISITING M.D: *(Examining patient)* What is the pertinent past history of this man?

ATTENDING M.D: He has had the usual childhood diseases. He was not ill until two months ago, when he had symptoms suggestive of passing a stone. Since then he has noted increasing weakness. He has had no fever or chills and does not describe any other symptoms.

VISITING M.D: What was the laboratory work?

ATTENDING M.D: The complete blood count, sedimentation rate, serum bilirubin, and urinalysis were normal. Alkaline phosphatase was 4 Bodansky units per 100 cc. of serum. Here are the KUB films for you.

VISITING M.D: *(Holding up the films)* I note some moderate demineralization in all the bones. It is a little difficult to determine because of the roentgen technic. However, this may be genuine, and although the laboratory work does not give an answer, we still have not settled the very important question of renal calculi with unexplained etiology. There is no evidence of kidney damage or poisoning. I would suggest that in the next three days you repeat the serum calcium, phosphorus, and alkaline phosphatase and also the Sulkowitch test on a urine specimen. Has the patient been taking any medicine in the past two to six months?

ATTENDING M.D: Nothing but some vitamin pills.

VISITING M.D: What type and how many?

ATTENDING M.D: One of the common multiple vitamin tablets, one a day only.

(Continued on page 96)

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COD LIVER OIL *that makes*

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the new

DESITIN®

hemorrhoidal **SUPPOSITORIES**

Desitin Hemorrhoidal Suppositories *with* Cod Liver Oil *help to* . . . **relieve pain and itching • minimize bleeding • alleviate congestion • guard against trauma** **promote healing** by virtue of their contents of high grade crude Norwegian cod liver oil, rich in vitamins A and D and unsaturated fatty acids (in proper ratio for maximum efficacy).

for greater patient comfort, *prescribe Desitin Hemorrhoidal Suppositories in hemorrhoids (non-surgical), pruritus ani, uncomplicated cryptitis, papillitis, and proctitis.*

℞ Composition: crude Norwegian cod liver oil, lanolin, zinc oxide, bismuth subgallate, balsam peru, cocoa butter base. No narcotic or anesthetic drugs to mask rectal disease. Boxes of 12 foil-wrapped suppositories.

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double the power to resist food IN OBESITY

"For every person who worries himself thin there are ***three*** who eat their way to obesity."[1] These individuals present a problem to the physician since their chief pleasure is food.

OBOCELL exerts a double action in keeping the obese patient on a diet l-o-n-g-e-r. Obocell (1) suppresses bulk hunger; (2) curbs the appetite. Furthermore, Obocell elevates the mood and supplies non-nutritive bulk residue lacking in obesity diets. Thus, patients on Obocell therapy naturally eat less, do not violate their diet, lose weight and are satisfied and happy.

Each Obocell tablet contains Dextro-Amphetamine Phosphate, 5 mg.; Methylcellulose, 150 mg. *Dose:* Three to six tablets daily, usually given 30 minutes before meals. ***Supplied:*** In bottles of 100, 500, 1000.

1. Bram, I.: Arch. Ped. 67: 543-552, 1950.

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Literature and Samples on Request

Obocell®

PART III

ATTENDING M.D: *(Four days later)* The second calcium determination was 11.1 mg., the third was 11.5, and the fourth was 11.8 mg. The phosphorus was 2.8, 2.4, and 2.6. The alkaline phosphatase remained within normal limits, below 5 Bodansky units.

VISITING M.D: And the roentgenogram of the skull and fingers that I requested?

ATTENDING M.D: Showed moderately severe demineralization diffusely.

VISITING M.D: I think that we are on the way to establishing the diagnosis of hyperparathyroidism in this case. What did the Sulkowitch test show?

ATTENDING M.D: A heavy cloud indicating an excessive amount of calcium in the urine. The specific gravity is normal and there is no evidence of renal insufficiency, so the test has meaning. I am quite sure the patient does not have osteitis fibrosa cystica generalisata. There are no tumors, fractures, or cysts in the bones. He does not have polyuria or polydipsia.

VISITING M.D: Many patients with hyperparathyroidism consult a physician because of symptoms of renal calculi, and one should always be on guard for this factor. The symptoms vary greatly and rarely are those of classic hypercalcemia—renal involvement with nephrosclerosis and diffuse skeletal disease. A few patients actually have no skeletal changes. The renal lesions are more common. Since calcium is maintained poorly in solution it is not surprising that calcium salts precipitate in the renal pelvis and parenchyma. Occasionally the condition resembles glomerulonephritis or pyelonephritis, resulting in uremia and death. With severe renal insufficiency as a complication, diagnosis of hyperparathyroidism is almost impossible to make conclusively because renal insufficiency lowers serum calcium and increases serum phosphatase, causing secondary changes. Furthermore there is a secondary hyperparathyroidism with parathyroid hyperplasia. This may appear with severe protracted primary glomerulonephritis or with polycystic kidneys, and osteitis fibrosa cystica may even occur. One should not rely solely on a single determination of serum calcium and phosphorus, as we have seen here. This is true for all significant laboratory tests, of course. I think that the patient's lethargy and weakness result from the hypercalcemia.

ATTENDING M.D: I am surprised that the alkaline phosphatase isn't elevated.

VISITING M.D: That is elevated consistently only with pronounced skeletal changes. The phosphatase is a laboratory change that is a result of the secondary effect. I would be interested in seeing roentgenograms of the teeth, since a study of the alveolar process is said to show disappearance of the lamina dura, that is, the fine line of cortex investing the root of each tooth, and alteration of the pattern of the bone. The teeth themselves are not affected.

ATTENDING M.D: I felt no enlargement in the neck.

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VISITING M.D: The parathyroid glands are small and usually cannot be felt. However, I think that an exploratory operation should be done. The parathyroid adenoma, if found, should be removed or the parathyroid tissue, if there is a diffuse hyperplasia, as is sometimes the case.

PART IV

SURGEON: *(At operation)* We found, as you suggested, that the case is one of primary hyperparathyroidism with an adenoma. We have removed the adenoma.

ATTENDING M.D: I wonder if the patient is going to have trouble with parathyroid tetany after the operation.

VISITING M.D: Patients who get into difficulty have high alkaline phosphatase and pronounced skeletal changes. We can anticipate little more than slight tingling for a few days in this case. Roentgen treatment is of no particular value for this disorder. One must always be on the alert for a hypervitaminosis D, which can mimic the entire picture of hyperparathyroidism. I questioned the patient, family, and the referring doctor carefully and found that the patient was not taking excessive doses of vitamin D. The symptoms of hyperparathyroidism result from the increased quantity of calcium in the blood and the involvement of the urinary tract and the skeleton. The important things to remember from this case are the significance of unexplained renal calculi and the need to pursue laboratory tests further when the clinical evidence is suggestive.

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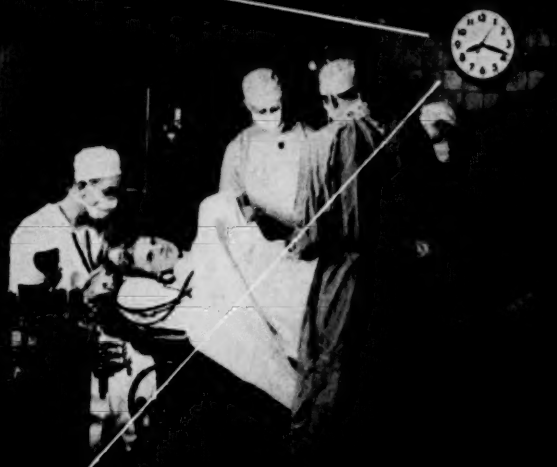

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An ampul of Protamide was administered intramuscularly daily to thirty-one cases of herpes zoster.

Of the thirty-one cases—twenty-six were relieved of pain in twenty-four hours to four days. Four cases required longer treatment for complete relief. In only one case was pain relief incomplete. (This case may have presented post-herpetic neuralgia, as pain was present for five weeks before treatment. More prolonged therapy is indicated in such cases.)

"The relief of pain was superior to that obtained when using either pituitrin, thiamine chloride, autohemotherapy, sodium iodide or high voltage roentgen therapy. Further, vesicles and crusts disappear much more rapidly than in untreated cases.

"The advantages of Protamide are the simplicity and absence of pain in administration, lack of reactions, and its apparent safety."

Additional clinical data on the dramatic results obtained with Protamide in the treatment of Herpes Zoster and the relief of the lightning pains and ataxia of Tabes Dorsalis will be furnished physician on request.

[1] *U.S. Armed Forces Med. Journal, September, 1950*

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ATHEROSCLEROSIS

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The new isotope technique[3] has demonstrated that:

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BIBLIOGRAPHY

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[2]Gertler, M.M.; Stanley M.; Blund, E.F.; Age, Serum, Cholesterol and Coronary Artery Disease. Circulation 2:517 (1950)

[3]Science 109:613 (June 17) 1949

[4]Biochem. J. 40:494 (1946)

[5]Gofman, J.W.; et al., Science. 111:166 (1950)

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Basic Science Briefs

Biology

Liver Tumor and Sex

A carcinogen, 2-acetylaminofluorene, administered in a fox chow diet produced liver changes in 90% of male rats but in less than 10% of females in six months. Dr. J. H. Leathem of Rutgers University, New Brunswick, N.J., found the sex difference to be related to hepatic weight. Male rats were pair fed against females fed ad libitum. In six months, when average body weights were about the same, livers weighed 18.6 gm. in males and 11.7 gm. in females, and hepatic protein was more abundant in males. Lesions consisted of liver cyst in 1 of 12 females and hepatomas in 7 of 9 males. The same carcinogen in a fox chow diet did not induce hepatomas in Swiss mice of either sex, but in a semisynthetic diet containing 24% casein and 8% Mazola produced tumors in 10 of 13 males and no females.

Cancer Research 11:266, 1951.

Endocrinology

Diabetes from Growth Hormone

If combined with ACTH, purified anterior pituitary growth hormone causes diabetes in rats with intact pancreas. Formerly, the growth factor has been found to affect only alloxanized or partially depancreatized rats. In rats receiving a high-carbohydrate diet by tube, no glycosuria occurred, and Dr. Frank L. Engel and associates of Duke University, Durham, N.C., noted that significant glycosuria or blood sugar over 190 mg. per cent was rarely induced with daily doses of ACTH. However, a group given both ACTH and growth hormone excreted up to 7 gm. of sugar daily and blood sugar rose to a maximum of 596 mg. per cent. Glycosuria varied with dietary volume and dosage of growth factor but was maintained as well by 3 as by 8 mg. of ACTH. The adrenal cortex evidently had a synergistic influence.

Federation Proc. 10:39, 1951.

Radiobiology

Phosphorus Metabolism

After partial hepatectomy, the phosphorus turnover in the liver increases before cell renewal accelerates to any noticeable extent. Apparently, active mitosis starts only when the rate of phosphorus incorporation has passed its peak. At the Detroit Institute of Cancer Research, radioactive phosphorus was injected subcutaneously into rats at various intervals after liver tissue was removed, and four hours later the animals were killed for tissue analysis. Dr. Ralph M. Johnson and associates observed greatest increase in hepatic P^{32} on the first day after operation and in cell division on the second, third, and fourth days.

Cancer Research 11:260, 1951.

selective control

of Gastrointestinal Spasm

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When pain, heartburn, belching, nausea, or unstable colon are due to gastrointestinal spasm, Mesopin provides an effective means for prompt relief. Its selective antispasmodic action controls spasticity with virtual freedom from the undesirable side effects of atropine or belladonna. Thus, Mesopin is relatively safe for the relief of gastrointestinal spasticity, such as pylorospasm, cardiospasm, spastic colon, and biliary spasm.

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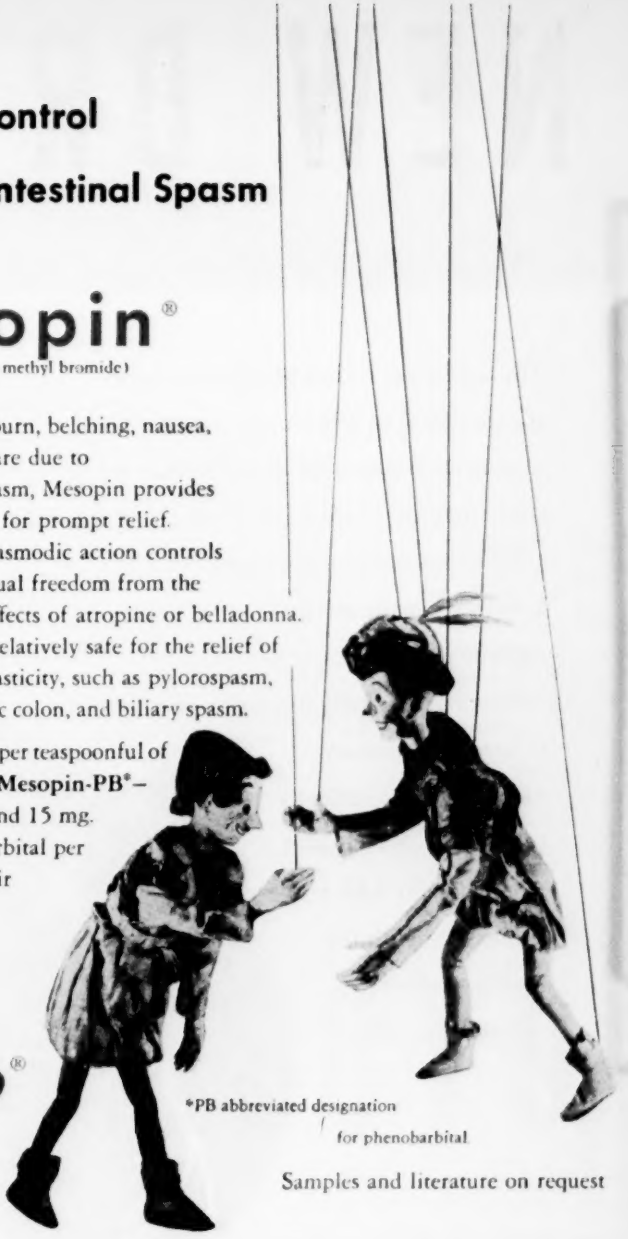

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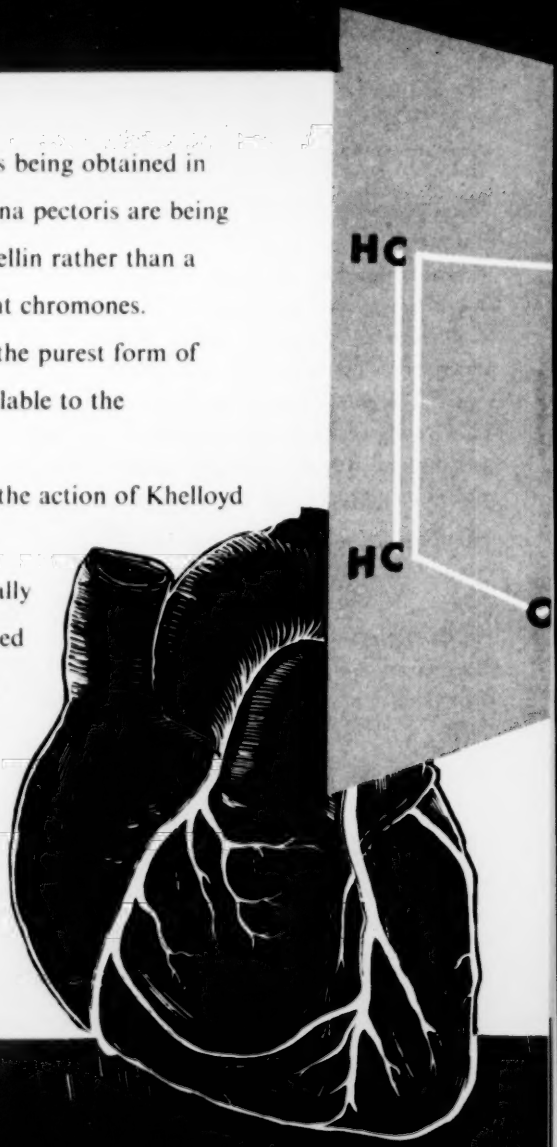

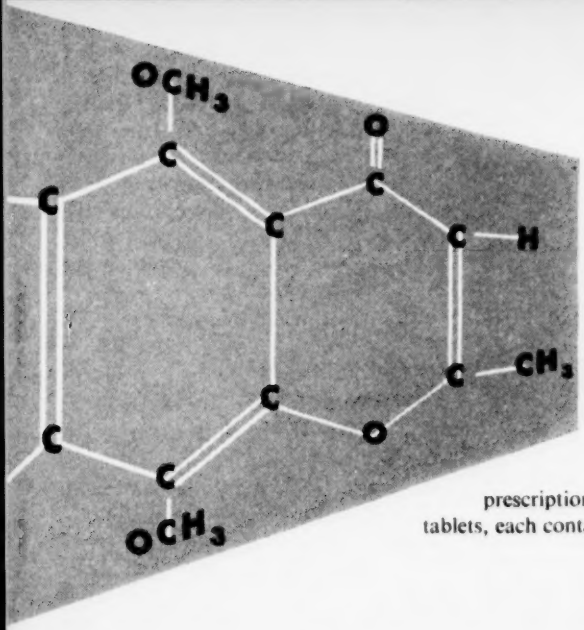

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Short Reports

Therapeutics

Drug for Hypertension

An agent known as 688-A reduces high blood pressure in oral or intravenous doses. Effects of the compound, $C_{18}H_{22}NOCl_2$ (N Phenoxyisopropyl-N-Benzyl-B-chlorethylamine Hydrochloride), are sympatholytic and adrenolytic. Dr. Edgar V. Allen and associates of the Mayo Clinic, Rochester, Minn., report that the drug counteracted manifestations of pheochromocytoma permitting removal of a 355-gm. tumor without incident. In some cases of essential hypertension, the blood pressure is greatly lessened. Side effects are chiefly orthostatic hypotension, tachycardia, dry mouth, and stuffy nose.

Gastroenterology

Hypermotility of Small Bowel

Gastrointestinal transit time in individuals with hypermotility may be greatly prolonged by oral administration of Banthine, an anticholinergic drug. Dr. Michael J. Lepore and associates of Columbia University and the Presbyterian Hospital, New York City, gave 100 mg. of Banthine by mouth to 7 patients. Of these, 3 had watery diarrhea with no evidence of organic disease of the gastrointestinal tract, and 4 had inflammatory bowel conditions. Before treatment, the stomach emptied in one to five hours; this time was increased by Banthine to from two and one-half to ten hours. Hypertonicity of the small intestine disappeared after ingestion of the drug. Diarrhea was not relieved for 1 patient with hypomotility. When given to 3 patients with ileo-anal anastomosis and uncontrollable diarrhea with rapid small intestinal transit, Banthine reduced the frequency and number of movements. Chief undesirable effects are temporary dryness of the mouth and dilatation of the pupils. Mild paralytic ileus, if encountered, usually vanishes when the dose is reduced.

Gastroenterology 17:551-559, 1951.

Oncology

Fluorometric Cancer Test

Cancer cells can be detected in cervical smears by nuclear fluorescence. As cells become abnormal, both range and fluorescent intensities increase. A quantitative scanning method is described by Dr. Robert C. Mellors and associates of the Sloan-Kettering Institute for Cancer Research and the Strang Clinic, New York City. Cells are stained to combine a basic fluorochrome with chromatin in the nuclei. Smears are examined with a fluorescence microscope illuminated by a constant source of ultraviolet light. Relative intensities of the visible light emitted by the dyed nuclear chromatin are measured with a photomultiplier tube.

Cancer Research 11:267-268, 1951.

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If the heart is cramped by tuberculous pericarditis, either during effusion or contracture after healing, the anterior portion of the sac should be removed promptly. Surgery may be done in two stages, and infection is controlled by antibiotics. At the Stanford University and Veterans Administration hospitals, San Francisco, 3 of 5 patients recovered postoperatively and 2 are still improving, report Drs. Emile Holman and Forrest Willett. Initially, the sixth left costal cartilage is resected, fluid is evacuated from the pericardial sac a drain is inserted through a lateral stab wound, and the first incision is closed. Streptomycin and penicillin are given before and after operation. From ten to twenty days later, median sternotomy and complete anterior pericardectomy are done, regardless of improvement. Otherwise, cardiac constriction may cause permanent disability.

J.A.M.A. 146:1-7, 1951.

Cardiology

Heart Puncture for Radiography

Roentgenograms of the cardiac ventricles and great arteries can be obtained by injection of Diodrast through the heart wall. At the University of Havana, Cuba, Drs. Elmo R. Ponsdomenech and Virgilio Beato Núñez have applied the new technic 45 times on 30 patients without harmful effects. A trocar 5½ in. long and 1.7 mm. in diameter and a mandrel about the same length are inserted through the chest. Before puncture, ¼ mg. of atropine sulfate and 0.25 gm. of Pentothal are administered. The supine position is used for ventricular definition, and the lateral for aortic views. The trocar is introduced on the left, between the xiphoid process and the seventh costal cartilage, to pierce the lower surface of the right ventricle. The left chamber is entered through the lowest part of the interventricular septum. The heart cavities, coronary arteries, aorta, and pulmonary artery are visualized by injecting 50 to 80 cc. of contrast fluid into each ventricle, using 25 lb. of pressure for the right and 35 lb. for the left cavity. Electrocardiograms are made before, during, and after the procedure, and the patient is kept under observation up to ten days.

Am. Heart J. 41:643-650, 1951.

Biology

Radiation Counteracted

Intravenous injection of methylene blue in mice from two to eight minutes before exposure to lethal doses of roentgen rays almost doubles the number of thirty-day survivals. At the Argonne National Laboratory, Chicago, Dr. B. Vincent Hall found that consistent protection was achieved by 0.25 to 0.5% solutions, but in only 1 of 4 trials with 1% solutions. Varying the actual amount of dye injected from 25 to 50 μg. per gram of body weight had little effect, however. Tissue damage may be reduced by hypoxia from methemoglobin formation or by more direct action. Treatment after irradiation is useless.

Federation Proc. 10:58-59, 1951.

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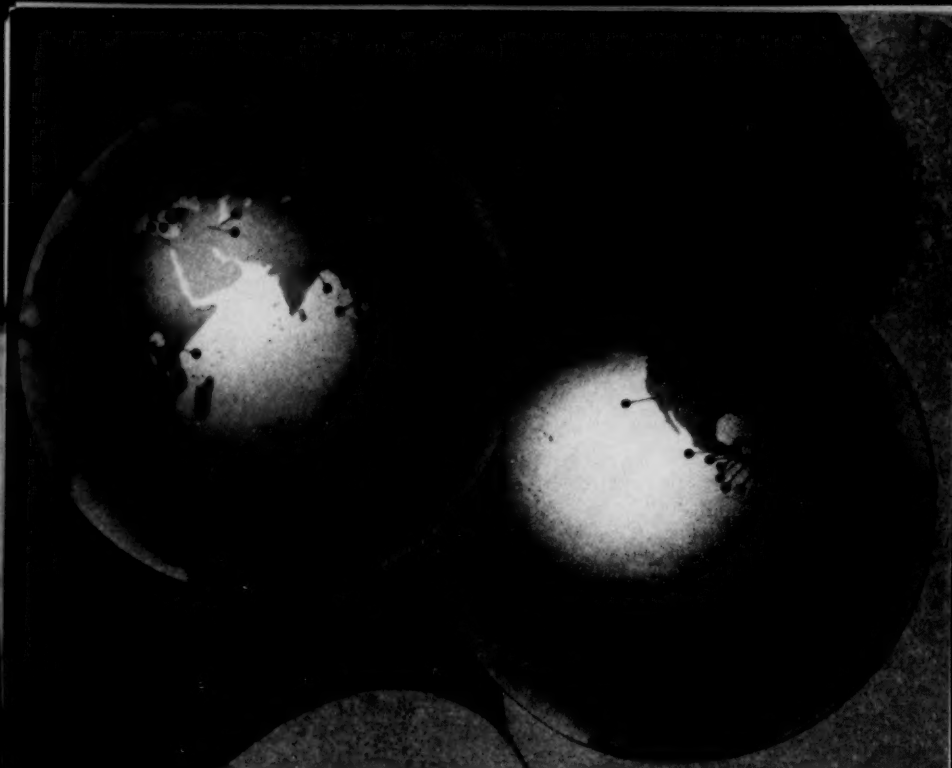

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Endocrinology

Local Action of Cortisone

Topically injected cortisone reduces inflammation by a regional rather than systemic mechanism and is utilized at a rate corresponding to intensity of the inflammatory process. Reactions of adrenalectomized mice were analyzed by Dr. Thomas F. Dougherty at the University of Utah, Salt Lake City. Histamine diphosphate was injected subcutaneously in 0.2-mg. doses alone or with cortisone acetate, and tissue examined at six, twelve, and twenty-four hours. From 0.25 to 50 μg. of cortisone prevented inflammation; when more histamine was given, more of the cortisone hormone was required. Doses between 5 and 20 μg. of cortisone produced eosinopenia in blood from the tail vein when injected alone but not when given with the standard inflaming dose of histamine.

Federation Proc. 10:36-37, 1951.

"He says 'rhus dermatitis' but ma says it's poison ivy."

Antibiotics

Penicillin Dermatitis

Scrotal or anal redness and itching during or after penicillin therapy are probably caused by pellagra brought on by interference of the drug with vitamin metabolism. Dermatitis with vesicles, papules, and scaling was observed in 20 cases by Dr. George E. Morris of Tufts College, Boston; most patients had undergone surgery and had never taken penicillin before. Nicotinic acid was given in oral doses of 100 mg. three times a day, and cold saline compresses were applied to affected parts. Lesions usually healed in twelve days.

New England J. Med. 244:758-759, 1951.

Otology

Deafness and Vitamins

Hearing is sometimes damaged by nutritional deficiency and may be improved by vitamin therapy. To detect metabolic disturbances, Dr. M. Joseph Lobel of New York City investigates renal and hepatic function of all patients with deafness, tinnitus, and vertigo. If the liver is impaired, intensive doses of vitamin B complex are of value. When the vitamin A level of serum is reduced with increase in cholesterol and pyruvic acid, vitamins A and B complex may be rapidly effective. Even if blood chemistry is unchanged, deafness or tinnitus may respond to Anatola, an injectable preparation of vitamin A. Doses of 2 cc. may be given intramuscularly twice a week for several weeks, but some courses must be prolonged for months.

Arch. Otolaryng. 53:515-526, 1951.

Kaopectate

Upjohn

Dermatology

Hair Loss and Sebum

Squalene, a component of human sebum, is strongly depilatory. Single applications produce completely bare patches on rabbits and guinea pigs, though not on mice. Skin becomes hyperplastic but is not inflamed, and hair regrows in a few weeks. Dr. Peter Flesch of the University of Pennsylvania, Philadelphia, believes that the same or a related substance may cause human baldness. In vitro, squalene, an isoprene polymer, inactivates the free sulfhydryl groups of glutathione, human epidermis, and mouse liver. Effects are probably due to alkylation of the sulfhydryl group by the unsaturated double bonds in the molecule.

Proc. Soc. Exper. Biol. & Med. 76:801-803, 1951.

Urology

Substitute Bladder

A continent bladder and urethra may be constructed of an isolated cecum and the adjoining segment of ileum. The loop of small bowel opens on the abdominal wall and is catheterized by the patient every four hours or as necessary to prevent overflow. Dr. James W. Merricks and associates of the Presbyterian Hospital of Chicago cite several advantages of the procedure, which has been utilized for 4 patients: [1] The urinary tract is not contaminated by the fecal stream. [2] Ureteral anastomoses are easily made and covered with peritoneum. [3] A cystoscope can be passed, and ureteral orifices can be dilated or otherwise treated. [4] Leakage is prevented without special apparatus. [5] Radical surgery of malignant tumor is given unlimited scope. The ascending colon is divided near the hepatic flexure and ends are closed, forming a pouch 6 to 8 in. long. The terminal ileum is severed 6 to 8 in. from the ileocecal valve, and the proximal end is closed. The bowel is joined by ileocolostomy. The new bladder is swung down to lie transversely at the pelvic brim; ureters are transplanted to the posterior wall by a modified Coffey 1 method, and the ileum is brought out through a stab wound. The reconstructed bladder may hold as much as 700 cc.

J. Urol. 65:581-589, 1951.

Pharmacology

Effects of Tween 80

Administration of the emulsifying agent Tween 80 to patients with diseases of the gastrointestinal tract frequently increases intestinal absorption of fat and vitamin A. Dr. John C. Krantz, Jr., and associates of the University of Maryland, Baltimore, and Harvard University, Boston, report that oral administration of Tween 80 in doses of 4.5 to 6 gm. daily to more than 100 patients for periods as long as four years has not been attended with any ill effect, alteration of metabolic rate or blood chemistry, change in excretion of water-soluble vitamins, or damage to the liver, kidneys, or the hematopoietic system. The polyoxyethylene particles of the emulsifier are completely eliminated from the body, about 95% in the stool and 5% in the urine.

Bull. School Med. Univ. Maryland 36:48-56, 1951.

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Hematology

Bone Marrow in Thyroid Disease

Formation of blood cells in bone marrow varies with activity of the thyroid gland. Bone marrow specimens from 26 hyperthyroid and 9 hypothyroid patients were analyzed before treatment or in the first week of therapy by Drs. Arnold R. Axelrod and Lawrence Berman of Wayne University and the City of Detroit Receiving Hospital. The following observations were made: In hyperthyroidism, all myeloid systems are hyperplastic, red marrow extends into the shafts of long bones, and fat decreases. Marrow may hypertrophy with or without anemia. The most constant change is relative lymphocytosis. In some cases, small red cells and heightened fragility in peripheral blood suggest hemolysis. If megakaryocytes increase, the platelet count is unchanged. Thyroid deficit results in hypocellular but not seriously depleted marrow and macrocytic anemia, with or without surplus fat. The marrow space may contain an excess of hyperemic or edematous nonhematopoietic tissue.

Blood 6:436-453, 1951.

Physiochemistry

Exchange Resin for Edema

An ammonium-liberating cation exchange resin may be more effective for intractable edema than mercurials and sodium restriction, but may cause profound acidosis with advanced renal disease when the compensatory mechanisms are impaired. Contrasting reactions to WIN 3000 were obtained in 4 cases of different types by Drs. William S. Beck and Howard C. Goodman of the Veterans Administration Center, Los Angeles. In 2 instances of congestive failure due to mitral stenosis and constrictive pericarditis, respectively, diuresis was abundant and carbon-dioxide combining power remained normal. Serum levels of sodium, potassium, chlorine, calcium, phosphorus, magnesium, and urea were unchanged, but less fixed base was excreted and more ammonia. In 2 cases of chronic glomerular nephritis in the nephrotic stage, with serum creatinine levels over 5 mg. per cent, resin produced moderate or severe acidosis, high serum phosphorus, and low calcium, while urinary ammonia remained low. Only 1 patient had diuresis.

Federation Proc. 10:11-12, 1951.

Endocrinology

ACTH and Tuberculin Reaction

Pneumonia after exposure to tuberculin is reduced in rabbits by daily doses of ACTH but increases when treatment is discontinued. After receiving 100 to 250 mg. of old tuberculin intratracheally, sensitized rabbits have severe pulmonary inflammation and consolidation. Drs. O. M. Reinmuth and David T. Smith of Durham, N.C., found that with 10 mg. of ACTH per day the extent of reaction was lessened 10 to 40% and the duration was shortened to approximately seven days. When the hormone was stopped between the fourth and thirteenth day of therapy, the initial reaction was observed in animals examined three days later.

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Washington Letter

Hospitalization Plan for the Aged Reopens Health Debate

The question of what the federal government should and should not do in the field of health has been rolled out into the open again. The prospect is for long and bitter debate, carrying through the next two sessions of Congress and into the 1952 presidential election campaign.

When the administration reopened the argument by introducing the plan for hospitalization of the aged at government expense, health legislation had been all but forgotten by Congress. The President's proposal for compulsory health insurance was definitely dead; even its chief sponsor, Federal Security Administrator Oscar Ewing, had admitted to a congressional committee that "the country doesn't seem to be ready for it."

Some interest was shown in emergency maternity and infant care for the wives of servicemen, but the inclination was to wait until more men are in uniform.

The Senate was stalling on its committee-approved bill for federal aid to medical legislation, and the House committee was giving no indication of any action on its various bills on this subject.

Routine appropriations for long-standing health programs, such as Public Health grants and Hill-Burton hospital construction, were being augmented, but generally just enough to compensate for increasing costs.

Now, however, the voters as well as Congress will be hearing a lot about health problems for the next year or so.

"Nonsense, call me over any time."

A great deal of what is known as "administrative security" was associated with preparation of the plan for offering government-paid hospitalization to old people. Details had been under discussion for more than a year. Called in for help and advice were certain labor officials, a group of top Federal Se-

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1. Hock, C.W.: J. Med. Assn. Ga. 40: Jan., 1951
2. Hufford, A.R.: J. Mich. St. Med. Soc. 49:1308, 1950
3. Chamberlin, D.T.: Gastroenterology 17: Feb., 1951

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curity Agency officials, and a number of others active in the health fields. Finally the question became one of timing the announcement for the best effect on Congress, the medical profession, and the voters.

On the eve of the convention of the American Medical Association—which might have been expected to take a critical look at the proposal, but more or less ignored it—Mr. Ewing visited President Truman. Apparently, Mr. Truman declined to make his message to Congress at that time but, within a few days, details of the plan started leaking out to the press, with FSA and the White House officially refusing to comment. But the idea was before the public, at any rate, and Mr. Truman would have to take his chances on his message urging adoption of the plan.

One of the appeals of the program is its seeming simplicity. Anyone 65 or over who is covered by social security would be entitled to a limited amount of hospital, but not medical, service in any one year. The person wouldn't have to be receiving social security benefits to be eligible for hospitalization and would be eligible regardless of private income.

But some of the ramifications are not so simple, as critics as well as sponsors were quick to learn.

On the credit side:

- The proposal offers additional security for old age—people could look forward to retirement without fear of a costly illness that might eat away savings.
- States, counties, and cities would be partially relieved of the burden of hospital expense for perhaps millions of elderly persons who have some income but not enough.
- The program is timely, suggesting something concrete in the field of geriatrics, and a logical follow-through on the Conference on the Aging sponsored by Federal Security Agency last summer.
- Politically, the plan would automatically attract Townsend and other pension followers to candidates who might support the program.

The problems posed were at least as numerous:

- Some health insurance experts estimate that persons over 65 require on the average $100 of hospital care in a year. Even if hospital stays were limited, the cost of the program would reach a high figure. Sponsors of the plan estimate that between 5 and 7 million persons would be eligible.
- Establishment of criteria for admission of an elderly patient to a hospital at no cost to himself or his relatives would be extremely difficult.
- The question is raised as to whether the fundamental philosophy of this program would run contrary to the opinion of many experts in the field of geriatrics who believe that the elderly patient often is better off at home amid familiar surroundings and in contact with his loved ones.
- Officials of the Division of Hospital Facilities, Public Health Service, estimate that the country has only about half the hospital beds it needs. For the last two sessions, Congress has appropriated for Hill-Burton construction only one-half

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1. Waters, E. G., and Wager, H. P.: Amer. J. Obstet. & Gyn. 60:885, 1950.

the sum authorized by law. The conclusion must be that we do not have enough hospital beds to handle all the patients who would become eligible and, furthermore, that Congress has no intention of greatly expanding the country's hospital facilities.

Allocation of Medical Supplies

Officials at National Production Authority believe that they have a system worked out to simplify allocation of scarce medical and hospital supplies.

They have proposed that the various claimants for supplies, such as the military services, Veterans Administration, and civilian outlets, decide among themselves what share of future production each group is to receive. Once they make up their own minds, the information would be passed on to the government agency responsible for allocating materials. The idea sounds so simple it probably won't be adopted.

Washington Notes

Extra millions of dollars for the Hill-Burton hospital program were picked up when the Senate Appropriations committee agreed that the House figure of $75,000,000 wouldn't mean $75,000,000 because of increased costs. The Senators added an additional $20,000,000 to the appropriation.

Military appointments include Dr. Albert R. Shands, Jr., of Wilmington, Del., to the Armed Forces Medical Policy Council to fill the position of Dr. W. Randolph Lovelace II, who has been elevated to the chairmanship. This is the top medical board in Defense Department and formerly was headed by Dr. Richard L. Meiling. Dr. Lowell T. Coggeshall, of University of Chicago, becomes chairman of the Committee on Medical Sciences of the Research and Development Board, replacing Dr. Francis G. Blake of Yale.

Mrs. Elizabeth K. Porter, president of American Nurses' Association, had an opportunity to present the case for the nurses when she appeared before the House Banking and Currency Committee to testify on extension of stabilization machinery. She said the nurses' lot was bad enough already, that lack of economic stability would make it even worse.

Veterans Administration declined to make special cases out of hometown care complaints from Wisconsin and Michigan and decided that the area medical directors could continue to handle such situations. However, Medical Director Joel T. Boone said that the study of hometown care complaints will be continued.

House Special Committee on Chemicals in Foods is continuing an intensive, scientific investigation of problems created by adding substances to foods as preservatives and coloring agents. Scores of physicians, agricultural experts, and cancer researchers have been heard. The objective is to try to work out a new law which will protect the public and still allow latitude for research and product promotion. The committee has demonstrated that it is not "out to get" anybody.

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Forensic Medicine

ARTHUR L. H. STREET, LL.B.

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PROBLEM: With a diagnosis of extrauterine pregnancy, a surgeon operated upon a woman's abdomen. Later he dismissed her complaint of pain, saying the discomfort was caused by gas, anemia, or tilted uterus. Two years afterward, another doctor removed a cloth sack, 10 by 16 or 18 in. In the patient's suit against the first doctor did proof of the finding of the sack imply negligence, requiring him to explain how it happened consistently with exercise of due care and skill?

COURT'S ANSWER: Yes.

The case was decided by the Arizona Supreme Court (230 Pac. 2d 213).

PROBLEM: Dr. K contracted to sell his practice to Dr. J and sued the latter to collect a balance due when he abandoned the practice and moved away. While the suit was pending, Dr. K sold the practice to Dr. G. Was Dr. G entitled to cancel the purchase on the ground that Dr. K concealed information as to the pending litigation with Dr. J?

COURT'S ANSWER: Yes.

The California District Court of Appeal, Second District, said that the vital question was not whether Dr. K had the right to resell the practice regardless of the litigation, but whether pendency of the litigation affected the desirability of Dr. G's buying it. Concealment of that fact was a species of fraud upon Dr. G (229 Pac. 2d 137).

PROBLEM: Was a surgeon employed to supervise an operation by a house surgeon liable for use by the latter of carbolic acid instead of alcohol to remove iodine after suturing of the skin? The supervising surgeon had left the room.

COURT'S ANSWER: No.

The New York Supreme Court, New York County, said that it was proper practice to permit a house surgeon to do the suturing and remove the iodine, there being no proof that he was incompetent to do that. The court added that regardless of whether an operation is deemed complete after suturing, there was no imprudence in the supervising doctor's leaving the room and trusting to hospital surgeon and nurses the closing of the skin and removal of iodine (82 N.Y. Supp. 2d 623).

PROBLEM: Under statutory power to regulate limited practice of medicine, could a state medical board ban prescription or administration by mechanotherapists, in performing minor surgery, of sulfathiazole ointment, Metycaine, nupercaine, quinocaine, or otozole and prescription or administration of vitamins or liver extract?

COURT'S ANSWER: Yes.

In so deciding, the Ohio Court of Common Pleas, Summit County, remarked that such restrictions are

(Continued on page 128)

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1. Griffith, J. Q., Jr. and Associates: Proc. Soc. Exper. Biol. & Med. 55:228-229 (March) 1944.

2. Shanno, R. L.: Amer. J. M. Sc., 211: 539-543 (May) 1946.

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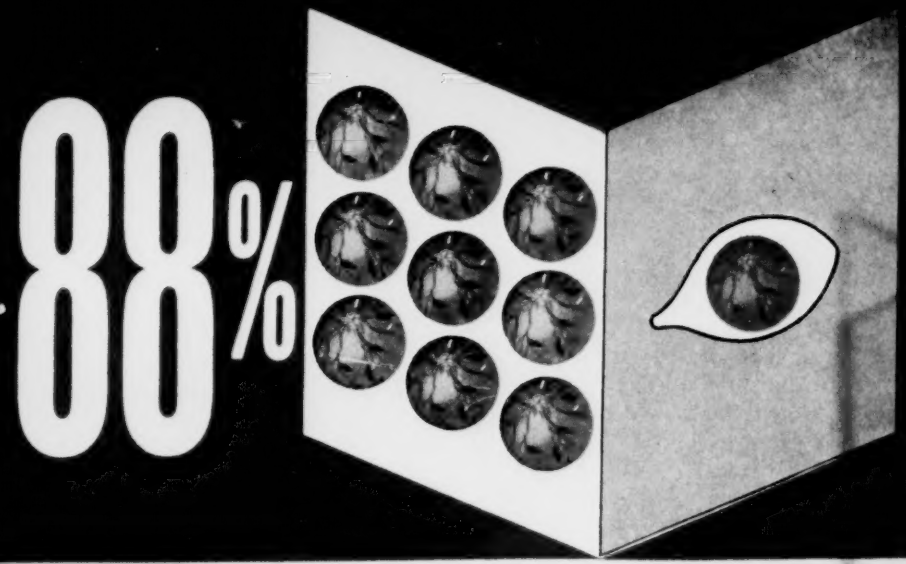

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necessary to protect unlimited medical practitioners against competition by those who have not sacrificed years in qualifying for a highly skilled profession, as well as to guard the public health and safety. If, at first blush, the court said, the limitation on right to prescribe vitamins and liver extract is inconsistent with the freedom with which the public may buy such items, the inconsistency disappears on reflection that anyone permitted to counsel their use ought to be well qualified to prescribe or administer in the light of the patient's needs (96 N.E. 2d 215).

PROBLEM: Under the Tennessee workmen's compensation act, was a 62-year-old employee deprived of right to an award because he refused to submit to an operation for double inguinal hernia resulting from a fall? He had dyspnea, tortuosity and enlargement of the descending aorta, an enlarged liver, arthritic lipping in the spine, and arthritic spurs in the lumbar region.

COURT'S ANSWER: No.

Judge Taylor of the U.S. District Court, Eastern District of Tennessee, noted that refusal to submit to operation for a single hernia had barred right to compensation in a case in which the operation involved only slight risk and good prospect of success. But the judge thought that because of the general physical condition of this 62-year-old employee, a different conclusion must follow.

The judge added that, although there was no showing of the ratio of risk between single and double herniotomy, it might be assumed that the risk of the latter would be "appreciably greater" (91 Fed. Supp. 960).

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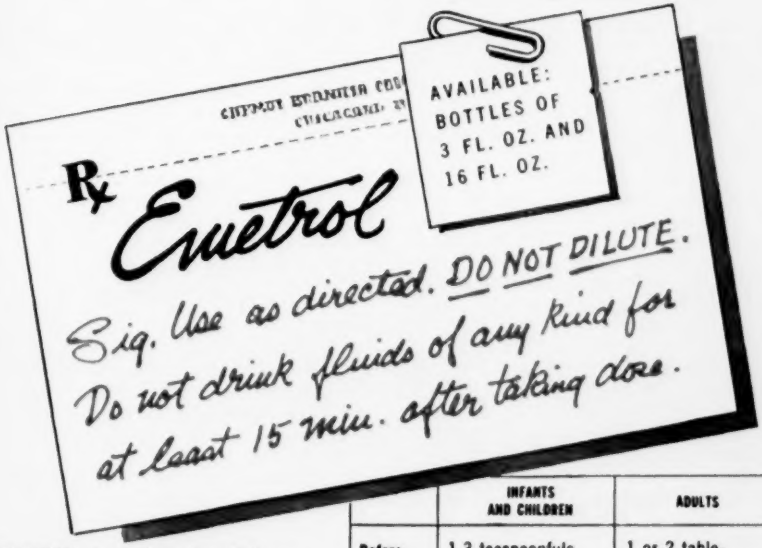

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1. Bradley, J. E., et al.: J. Pediat. 38: 41 (Jan.) 1951

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1. Kaliski, S. R., and Mitchell, D. D.: Treatment of Diarrhea with Carob Flour, Texas State J. Med. *46*:675 (Sept.) 1950.
2. Smith, A. E., and Fischer, C. C.: The Use of Carob Flour in the Treatment of Diarrhea in Infants and Children, J. Ped. *35*:422 (Oct.) 1949.

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Patient: B.H. (shown in photos on opposite page), age 46, married, the mother of a 16-year-old son. She has financial security and "no real cause for worry", but she "enlarges the simple vicissitudes of life until they become great anxieties".

The patient is mentally alert and has a fair sense of humor, but even this does not free her from her "moods" and apprehensiveness. "Her aches and pains are legion." She has frequent headaches attributable to the early menopausal syndrome. Most of her pain centers in the back along the spinal column. X-rays show osteoarthritic areas.

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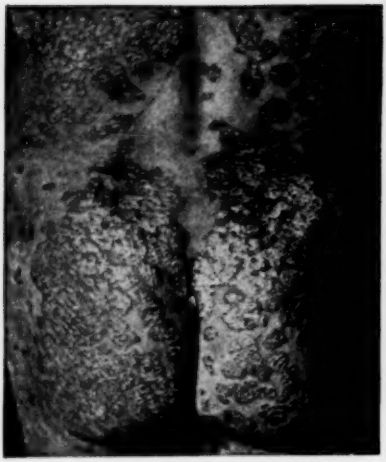
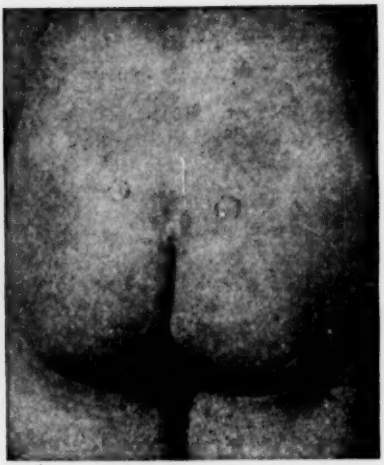
These candid photographs of Patient B.H.—snapped unbeknown to her—were taken during an interview in her physician's office. This study of the patient describing her symptoms of mental and emotional distress forms an interesting complement to the case history on the opposite page.



(Left) Psoriasis of 15 years' duration



(Right) Same case after 5 weeks with Mazon

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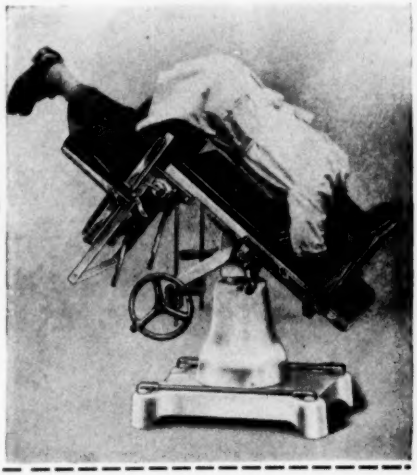

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Top of the Class

Summer camp was over. The youngsters had been given their final check-up by the camp physician and had also received their school grades. The mother of one came up to take her son home. The boy rushed to her outstretched arms, waving his certificates and shouting, "Mom, I got 100 in arithmetic and my Wassermann is plus 4."—H.H.

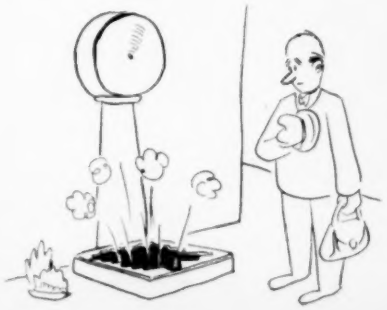
One Solution

The most popular girl at the country club dance was the fiancee of a young doctor who was in the east taking post-graduate work. My own partner called my attention to the girl. Said she, "Jane certainly seems to have solved the problem of what to do until the doctor comes."—T.E.

Hardly a Wicket Tale

A sedentary type came into my office complaining of sore feet. After a look I told him his trouble was athlete's foot.

"Better take another look, Doc," he said, "Why I don't even play croquet!"—O.A.A.



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(1) Carpenter, E. B.: Clinical Experiences with Chlorophyll Preparations, Am. J. Surg. 77:167, 1949. (2) Langley, W. D., and Morgan, W. S.: Chlorophyll in the Treatment of Dermatoses, Pennsylvania M. J. 51:44, 1947. (3) Moss, N. H.; Morrow, B. A.; Long, R. C., and Reedin, I. S.: Effectiveness of Chloresium in Wound Healing and Deodorant Effects, J.A.M.A. 140:1336 (Aug. 27) 1949. (4) Bowers, W. F.: Chlorophyll in Wound Healing and Suppurative Disease, Am. J. Surg. 73:37, 1947.

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I am a receptionist for a pediatrician. Saturday mornings our waiting room is always crowded and inevitably the children get restless. On this particular day one of our patients was a little redheaded, freckle-faced boy who sat minding his own business. A fidgety little girl had been watching him from across the room. Suddenly she walked over to him and asked, "What makes those big brown splotches on your face?"

The boy looked at her and grinned. "Just my iron constitution rusting out on me, I guess."—M.K.

"I only speak one language," sighed the health service resident, "but, boy, I am familiar with many tongues."—T.F.

Chief Complaint

(A note received by H.L.A. from a patient in the GI clinic)

Dear Doctor,

The infection in my mouth she has been lot better but not so well because my lips seem to be like dead I dont feel them and also the gums.

And in the morning I feel in the back part of my body in the skin the same dead. After I feel it in my stomach some kind of swollen and little. but when I move my body I feel like something big. & I feel a little pain & something like burn inside of my stomach. Maybe the ulcer again. Maybe I catch it again. I had it last year. & I think these swollen come from the stomach because I feel kind of dead on the bottom partes.

"Steady, old man, steady."

New

flexibility plus

acceptability in

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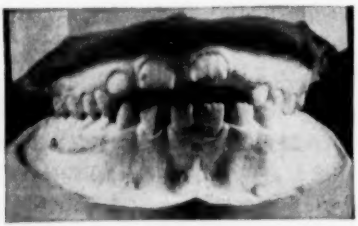

(Cast from a children's dental clinic showing malocclusion due to thumb sucking)

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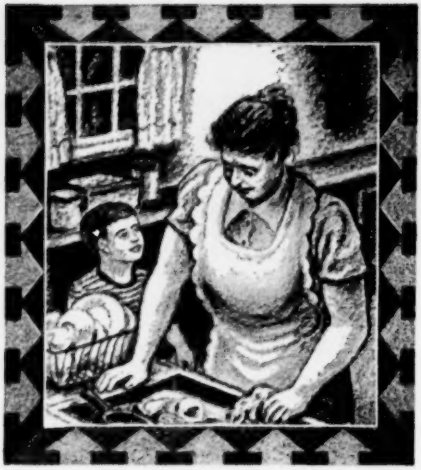

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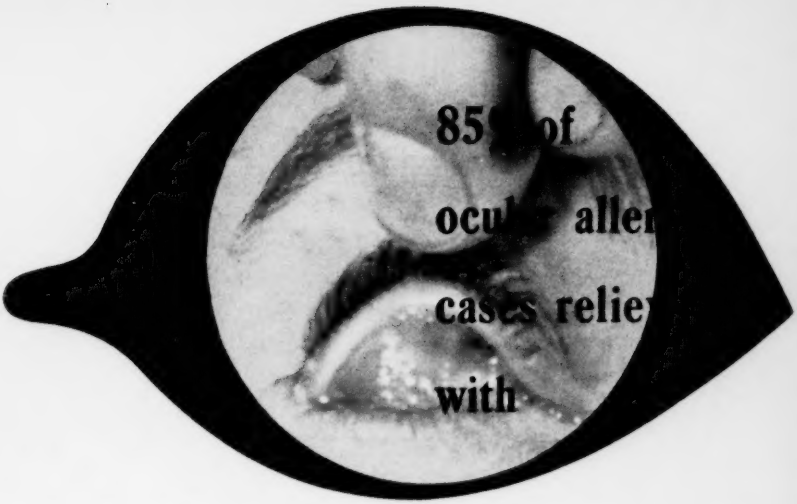

Antistine Ophthalmic Solution

Hurwitz[1] reports symptomatic relief in 85% of 78 patients with ocular allergies treated with Antistine Ophthalmic Solution. This supports his previous conclusions concerning the unusually satisfactory results obtained with Antistine in ocular allergy.[2]

St. Clair and Bird likewise recommend Antistine Ophthalmic Solution used both as drops and packs for controlling local symptoms of conjunctivitis and dermatitis of the lids.[3]

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Issued: Antistine® Ophthalmic Solution containing Antistine (antazoline) hydrochloride, 0.5% in dropper bottles of 15 cc.

1. Hurwitz, P.: Illinois M. J. 98:113 (Aug.) 1950.
2. Hurwitz, P.: Am. J. Opth. 31:1409 (Nov.) 1948.
3. St. Clair, C. T. & Bird, B. W.: West Virginia M. J. 46:39 (Feb.) 1950.
4. Friedlaender, A. S. and Friedlaender, S.: Ann. of Allergy 6:23 (Jan.-Feb.) 1948.

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